

STATE OF SOUTH DAKOTA
COUNTY OF MINNEHAHA

CHARLES RUSSELL RHINES,

Plaintiff,

vs.

**SOUTH DAKOTA DEPARTMENT,
OF CORRECTIONS and MIKE
LEIDHOLT,** Secretary, South Dakota
Department of Corrections, **DARIN
YOUNG** in his capacity as Warden of
the South Dakota State Penitentiary

Defendants.

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* IN CIRCUIT COURT
* SECOND JUDICIAL CIRCUIT
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* CIV. 19-
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* RESPONSE TO MOTION FOR A
* PRELIMINARY INJUNCTION,
* TEMPORARY RESTRAINING
* ORDER AND STAY OF EXECUTION
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Defendants South Dakota Department of Corrections, Mike Leidholt and Darin Young through their counsel, Paul S. Swedlund, Assistant Attorney General, hereby responds to plaintiff Charles Russell Rhines' 11th hour motion for a stay of execution. Because Rhines cannot provide an adequate explanation for why he has waited until the last minute to bring a claim he could have brought years ago or a significant possibility of succeeding on it, and because of the state's and victims' strong interest in having Rhines serve his sentence, Rhines' motion should be denied.

SUMMARY OF ARGUMENT

Rhines could have brought this challenge 8 years ago. Instead, he waited until the end of the 11th day before the week scheduled for his execution to raise this issue. The issue is barred by *res judicata* because Rhines could have raised this issue in the method of execution challenge he litigated back in 2011 (or brought a stand-alone claim at any time since). The equitable remedy

of a stay of execution generally is not available to those who delay bringing claims that could have been brought sooner.

Also, Rhines cannot succeed on the merits. Rhines' argument rests on the classification of pentobarbital as a short-acting barbiturate in a low-dosage, clinical setting. Here the drug is not being administered in a low dose in a clinical setting. Comparing the properties of low-dosage sodium thiopental or pentobarbital in a clinical setting with high-dosage pentobarbital in an execution setting is comparing apples to oranges. When used in a high-dosage, execution setting, the properties of pentobarbital are identical to the ultrashort-acting barbiturate sodium thiopental. Thus, no stay is warranted because Rhines cannot demonstrate a likelihood of success on the merits.

ARGUMENT

A. Rhines' Claim Is Barred By *Res Judicata*

1. Eight years ago Rhines was served notice of the adoption of a revised execution protocol. The protocol designated either sodium thiopental or pentobarbital as the barbiturate to be used in the 2-drug protocol that Rhines has elected. ERM A.12(B).C.1, Exhibit 1. The notice was served on Rhines in the context of a then-pending challenge to his method of execution before Judge Trimble in the 7th Circuit Court.
2. Rhines filed his challenge on February 21, 2008. FIRST AMENDED PETITION, Exhibit 2. Then, as now, Rhines requested declaratory and injunctive relief. Then, Rhines' complaints were:

- a. That 23A-27A-32 “as codified on the date of Charles R. Rhines’ convictions” gave “no guidance as to the type of substances used or the quality of substances used for the punishment of death.” FIRST AMENDED PETITION at Page 11, ¶¶ 37, 39.a, Exhibit 2.
 - b. About “the two chemical[s] specified in SDCL 23A-27A-32 in effect at the time [of] Charles R. Rhines’ conviction.” FIRST AMENDED PETITION at Page 12, ¶ 6, Exhibit 2.
 - c. That “[a]n execution pursuant to SDCL 23A-27A-32 as codified on the date of Charles R. Rhines’ conviction violates the constitutions of the State of South Dakota and the United States prohibition against cruel and unusual punishment and is therefore unconstitutional.” FIRST AMENDED PETITION at Page 13, ¶ 7, Exhibit 2.
 - d. That “a[n] execution carried out by means of the two-drug cocktail provided in SDCL 23A-27A-32 in effect at the time of Charles R. Rhines’ conviction constitutes cruel and unusual punishment in violation of the constitution of the State of South Dakota and the United States as well as depriving Rhines of his right to *due process* of law.” FIRST AMENDED PETITION at Page 13, ¶ 3, Exhibit 2 (emphasis added).
3. Though he had been served with a copy of ERM A.12(B) on October 24, 2011, which contained explicit notice of the state’s intention to use pentobarbital in the 2-drug protocol that Rhines has elected, and though Rhines’ then-pending complaint for declaratory and injunctive relief

contained general arguments that ERM A.12(B).C.1 denied him process that he felt was due to him under SDCL 23A-27A-32 and in opposition to the “two chemical[s]” that would be used, Rhines never raised a claim that pentobarbital is not an ultrashort-acting barbiturate within the meaning of SDCL 23A-27A-32 as codified on the date of his convictions.

4. During the litigation of Rhines’ method of execution claims, the state had its expert opine on whether a 2-drug protocol of pentobarbital and a paralytic agent would provide a painless and humane death for an inmate. DERSHWITZ TESTIMONY at 21/22, excerpt attached as Exhibit 3. In addition to the ERM A.12(B).C.1. itself, this questioning put Rhines on further notice of the state’s intent to use pentobarbital in carrying out the 2-drug protocol that he has chosen.
5. Judge Trimble ruled against Rhines. TRIMBLE DECISION, Exhibit 4. The South Dakota Supreme Court affirmed. AFFIRMANCE ORDER, Exhibit 5.
6. During Rhines’ subsequent federal proceedings, the state expected Rhines to amend his complaint to further challenge the state’s method of execution in federal court. The state moved peremptorily to dismiss the claim (along with all of Rhines’ other pending claims) anticipating that Rhines would continue his method of execution challenge. Remarkably, Rhines did not do so. Instead Rhines inexplicably threw in the towel on further challenging the method of his execution, brusquely stating that “the issue of the manner of execution, which was included in the latest

litigation in the state court, and which was discussed at such length in respondent's brief, is not before this court and this court cannot issue any sort of judgment concerning that issue." RHINES RESPONSE TO FEDERAL MOTION FOR SUMMARY JUDGMENT, CIV # 00-5020 [DOCKET 232] at 6, excerpt attached as Exhibit 6.

7. "The doctrine of *res judicata* disallows reconsidering an issue that was actually litigated or which *could have been* raised and decided in a prior action. *Farmer v. South Dakota Dept. of Rev.*, 2010 SD 35, ¶ 7, 781 N.W.2d 655, 659. Because Rhines certainly could have brought a specific challenge to the use of pentobarbital to carry out the 2-drug protocol as part of his then-pending complaint for declaratory and injunctive relief 8 years ago, his current claims, and dependent claim for equitable injunction, are firmly barred by principles of *res judicata*.

B. Rhines Cannot Meet The Standards For A Stay Of Execution

8. Recently, in *Bucklew v. Precythe*, 139 S.Ct. 1112, 1134 (2019), the United States Supreme Court condemned the practice of reflexively entering stays of execution. Stays of execution "should be the extreme exception, not the norm." *Bucklew*, 139 S.Ct. at 1134. *Bucklew* reaffirmed the longstanding principle that the mere fact that an inmate has filed some claim for relief – even a potentially meritorious one – "does not warrant the entry of a stay as a matter of right." *Nelson v. Campbell*, 541 U.S. 637, 649 (2004).

9. “[A] stay of execution is an equitable remedy. It is not available as a matter of right, and equity must be sensitive to the state’s strong interest in enforcing its criminal judgments.” *Hill v. McDonough*, 547 U.S. 573, 584 (2006). Before a court grants a stay, it must consider “the relative harms to the parties,” “the likelihood of success on the merits,” and “the extent to which the inmate has delayed in bringing the claim.” *Nelson*, 541 U.S. at 649-50. A “preliminary injunction [for a stay of execution is] not granted unless the movant, by a clear showing, carries the burden of persuasion.” *Hill*, 547 U.S. at 584. Rhines has not carried his burden with clear evidence that the relative harms weigh in his favor, that he is likely to succeed on the merits and that he has not been purposefully and strategically dilatory in bringing his claim.

i. Relative Harms

10. A court considers the relative harms to the parties by balancing the competing interests of Rhines and South Dakota; specifically, Rhines’ interest in being executed with sodium thiopental versus pentobarbital. *Ledford v. Georgia Dept. of Corr.*, 856 F.3d 1312, 1315 (11th Cir. 2017). “A defendant’s interest in being free from cruel and unusual punishment is primary; however, a state’s interest in effectuating its judgment remains significant.” *McNair v Allen*, 515 F.3d 1168, 1172 (11th Cir. 2008). Victims of crime also “have an important interest in the timely enforcement of a sentence.” *Hill*, 547 U.S. at 584.

11. As detailed below, courts have uniformly found that sodium thiopental and pentobarbital perform exactly the same and that substituting pentobarbital for sodium thiopental does not materially alter an execution protocol. Given that there is no difference between the two drugs when administered in an execution setting, Rhines' interest in being executed with sodium thiopental instead of pentobarbital is far outweighed by the state's interest in effecting its judgment and the victims' interest in justice (after 27 years) for their murdered son. *Ledford*, 856 F.3d at 1315.

ii. Likelihood Of Success On The Merits

12. "[L]ike other stay applicants, inmates seeking time to challenge the manner in which the state plans to execute them must satisfy all of the requirements for a stay including a showing of a significant possibility of success on the merits." *Hill*, 547 U.S. at 584. Rhines cannot demonstrate a significant probability of success on the merits because his claim is barred by *res judicata* and because pentobarbital meets the classification of an ultrashort-acting barbiturate in an execution setting.
13. Just as "[a] time-barred complaint cannot justify a stay of execution, regardless of whether its claims have merit," a claim barred by *res judicata* will not justify a stay of execution, even if it may have had merit had it been timely litigated. *Gissendaner v. Georgia Dept. of Corr.*, 779 F.3d 1275, 1284 (11th Cir. 2015); *Ledford*, 856 F.3d at 1315. Because Rhines' complaint is barred by *res judicata*, he cannot show a substantial

likelihood of success on the merits and a stay of execution is not warranted. *Ledford*, 856 F.3d at 1316.

14. Nor is there a “significant possibility” that Rhines can succeed in proving that pentobarbital does not meet the classification of an ultrashort-acting barbiturate as contemplated by SDCL 23A-27A-32 as codified at the time Rhines was convicted. *Hill*, 547 U.S. at 584.
15. SDCL 23A-27A-32 does not specify sodium thiopental. It permits the use of any drug that meets the classification of an ultrashort-acting barbiturate. Courts have consistently found that there is no material difference between sodium thiopental and pentobarbital:
 - a. In *Ringo v. Lombardi*, 677 F.3d 793 (8th Cir. 2012), the court observed that “each court to consider the issue has uniformly held that the use of pentobarbital in lieu of sodium thiopental” is not a material alteration to an execution protocol.
 - b. In *Powell v. Thomas*, 641 F.3d 1255, 1258 (11th Cir. 2011) the court stated that “[t]he replacement of sodium thiopental with pentobarbital does not constitute a significant alteration in the lethal injection protocol.”
 - c. In *Pavatt v. Jones*, 627 F.3d 1336, 1338 (10th Cir. 2010), the court rejected an 8th Amendment challenge to Oklahoma’s lethal injection protocol based on the state’s substitution of pentobarbital for sodium thiopental. Though Oklahoma’s statute, like South Dakota’s, expressly required the use of an ultrashort-acting barbiturate, the

Pavatt court found that the change was not sufficiently substantial to rise to the level of a legitimate claim of entitlement protected by due process. The *Pavatt* court also noted that Oklahoma's statute was "not entirely clear" whether the legislature used the term "ultrashort-acting" in the sense of how quickly the drug took effect or the duration of effect. *Pavatt*, 627 F.3d at 1340, n. 3.

- d. In *Jackson v. Danberg*, 656 F.3d 157, 160 (3rd Cir. 2011), the court observed that "[p]entobarbital is a barbiturate commonly used to euthanize terminally ill patients who seek death with dignity in states such as Oregon and Washington." Quoting *Beatty*, 649 F.3d at 1075 (denying rehearing *en banc* because inmate had no likelihood of success on 8th Amendment claim based on switch to pentobarbital).
- e. In *Ferguson v. Florida State Prison*, 493 Fed.Appx. 22, *2 (11th Cir. 2012), the court stated that "the use of sodium pentobarbital as the first drug in the three-drug sequence does not constitute a substantial change" to Florida's execution protocol. *Valle v. Singer*, 655 F.3d 1223, 1230 (11th Cir. 2011)(replacement of sodium thiopental with pentobarbital does not constitute a significant alteration of the execution protocol).
- f. *Powell v. Thomas*, 643 F.3d 1300, 1304 (11th Cir. 2011), noted the minimal differences between sodium thiopental and sodium pentobarbital, both being "classified as barbituates" and differing only

“in their length of effect,” which “simply means [that pentobarbital’s] effect lasts longer than that of sodium thiopental.”

- g. In *Jordan v. Fisher*, 823 F.3d 805, 811 (5th Cir. 2016), where the state planned to use pentobarbital in the execution of three inmates, the inmates, like Rhines, complained that state law “prevent[ed] the state from executing them using any drugs other than ‘an ultrashort-acting barbiturate.’” The court ruled that switching from sodium thiopental to pentobarbital did not implicate any liberty interest.
- 16. The cases finding no significant difference between sodium thiopental and pentobarbital are consistent with the testimony of the experts who testified in Rhines’ method of execution challenge (including Rhines’ own expert, Dr. Heath) and the state’s experiences with sodium thiopental and pentobarbital in prior executions.
- 17. Dr. Alan Dershwitz, an anesthesiologist, testified on behalf of the state. According to Dr. Dershwitz:
 - a. “[O]nce 5,000 mg [5g] of pentobarbital have been administered intravenously to an inmate, there is, to a reasonable degree of medical certainty, an exceedingly remote chance that the inmate could experience the effects of the subsequently administered pancuronium bromide A dose of 5,000 mg of pentobarbital will cause virtually all persons to stop breathing. In addition, a dose of 5,000 mg of pentobarbital will cause the blood pressure to decrease to such a degree that perfusion of blood to organs will cease or decline such

that it is inadequate to sustain life [V]irtually every person given 5,000 mg of pentobarbital will have stopped breathing prior to the administration of pancuronium bromide. Thus, even in the absence of the administration of pancuronium bromide . . . the administration of 5,000 mg of pentobarbital by itself would cause death in almost everyone.” DERSHWITZ AFFIDAVIT at ¶¶ 12-13, Exhibit 7.

- b. In finding no significant difference between sodium thiopental and pentobarbital, the *Pavatt* court stated Dr. Dershwitz’s similar testimony in that case “persuasively characterized a 5,000 milligram dose of pentobarbital as ‘an enormous overdose’ that ‘would cause a flat line of the EEG, which is the deepest measurable effect of a central nervous system depressant’ and ‘would be lethal as a result of two physiological responses:’ the cessation of respiration and the drop in blood pressure ‘to an unsurvivable level.’” *Pavatt*, 627 F.3d at 1339. The *Pavatt* court also stated that Dr. Dershwitz “credibly testified . . . that the 5,000 milligram dosage will give rise . . . to a virtually nil likelihood that the inmate will feel the effects of the subsequently administered vecuronium bromide.” *Pavatt*, 627 F.3d at 1339. See also *Valle*, 655 F.3d at 1230 (finding Dr. Dershwitz’s testimony that a massive dose of pentobarbital will reliably and swiftly produce death convincing).
- c. In his videotaped testimony in Rhines’ method of execution challenge, Dr. Dershwitz stated that:

- i. "When pentobarbital is injected intravenously, it has an onset of effect that is almost immediate. Within thirty to forty-five seconds after the drug reaches the brain, the person would be expected to lose consciousness. DERSHWITZ TESTIMONY at 9/20, excerpt attached as Exhibit 3.
- ii. "[P]entobarbital will have this profound effect to decrease circulation, it will stop breathing within a minute or two of its administration." DERSHWITZ TESTIMONY at 11/5, excerpt attached as Exhibit 3.
- iii. When asked whether a 2-drug protocol of pentobarbital and a paralytic would have the same effect as he described above, Dr. Dershwitz testified that it would. DERSHWITZ TESTIMONY at 21/22, excerpt attached as Exhibit 3.
- iv. When asked whether the descriptions provided by the warden of how Eric Robert and Donald Moeller had responded to a 5 gram (5,000 mg) dose of pentobarbital were consistent with the effects that he had previously described, Dr. Dershwitz testified "[y]es, and in fact, the warden's description, although given by a medical layperson, does not differ from what [he] observe[s] when [he] give[s] patients an intravenous drug to cause them to enter a general anesthetic state." DERSHWITZ TESTIMONY at 21/22, excerpt attached as Exhibit 3.

18. Dr. Mark Heath, an anesthesiologist, testified for Rhines in his method of execution challenge (and for the inmate in *Smith v. Mont. Dept. of Corrections*, 2015 WL 5827252 (Mont.Dist.1)). Dr Heath's prior testimony supports the state's position that pentobarbital meets the same classification standards as sodium thiopental (which likely explains his conspicuous absence here at the end stage of Rhines' litigation):

- a. Dr. Heath testified that, while "barbiturates are *typically* divided into classes, depending on how rapidly they exert their action and for how long the exert their action . . . there are different ways that people do it." According to Dr. Heath, "pentobarbital is *typically* put into the short- or medium-acting categories depending on which author is referring to it." Dr. Heath's testimony in Rhines' case (like his testimony in the *Smith* case) reflects that there are "different ways" to classify the same barbiturate depending on performance factors and application. HEATH RHINES TESTIMONY at 21/10, excerpt attached as Exhibit 8.
- b. Dr. Heath, Rhines' own erstwhile expert, fudges noticeable with the adverb *typically*. "Typically" is hardly categorical, inherently admitting of contexts where it can meet the ultrashort-acting classification depending on recognized medical variables. One such context is in procedural sedation and analgesia in pediatric emergency medicine where physicians regard "[p]entobarbital [a]s an ultra-short acting barbiturate" that is "very useful for sedation prior to

diagnostic imaging procedures” when “given intravenously.”

Meredith, *Pediatric Procedural Sedation And Analgesia*, 1:2 JOURNAL OF EMERGENCIES, TRAUMA AND SHOCK 88 (2008). In a high-dosage context, “pentobarbital – like the ‘ultrashort-acting’ drugs thiopental and methohexital – is both a myocardial depressant (a decrease in SVI with unchanging PCWP) and a vasodilator (a decrease in SVRI and evidence for venodilation).” Todd, Drummond and Sang, *Hemodynamic Effects of High Dose Pentobarbital: Studies in Elective Neurosurgical Patients*, 20 NEUROSURGERY 559 (1987).

- c. According to Dr. Heath, “[i]f the intended dose of pentobarbital were to be successfully delivered into the circulation of a person and carried to their brain in this dose [5,000 mg] it would cause complete depression of all the brain activity such that there would be no electrical activity in the brain whatsoever. The electrical activity of the brain sustains many important bodily functions, but in particular it sustain[s] respiration, the rhythmic breathing, that we do all the time and when pentobarbital *or any barbiturate* would stop all activity in the brain . . . [i]t would stop breathing from occurring.” HEATH RHINES TESTIMONY at 23/3, excerpt attached as Exhibit 8.
- d. In testimony given by Dr. Heath in the *Saar* case (which was used to impeach his testimony in Rhines’ method of execution challenge) Dr. Heath testified that sodium thiopental, like pentobarbital, will

produce death in 60 seconds. HEATH SAAR TESTIMONY at 70/16, 71/13, excerpt attached as Exhibit 9.

- e. In Rhines' method of execution challenge, Dr. Heath testified that, like sodium thiopental, the respiratory arrest secondary to brain inactivity secondary to pentobarbital administration occurs within "60 seconds." HEATH RHINES TESTIMONY at 81/19, 87/4, excerpt attached as Exhibit 8.
- f. In the *Cooey* case, when asked how long an execution would take using massive doses of sodium thiopental, Dr. Heath (in the context of a discussion concerning the efficacy of pentobarbital) stated that it "would be the same as using massive doses of some other anesthetic." HEATH COOEY TESTIMONY at 40, excerpt attached as Exhibit 10. In fact, believing that Ohio could not carry out an execution because it did not have *pentobarbital*, Dr. Heath extolled pentobarbital as superior to sodium thiopental and testified that it should be used *instead*. As an example, Dr. Heath referenced an execution using sodium thiopental that had taken 14 minutes start to finish and opined that "if you give a massive dose of pentobarbital, which can be done very quickly, in all likelihood the person is going to be dead in less time than that [e.g. less than 14 minutes]." HEATH COOEY TESTIMONY at 41, excerpt attached as Exhibit 10. When asked to describe the difference between administering pentobarbital and sodium thiopental, Dr. Heath testified that "[sodium] thiopental is

given in large volumes, and so it takes a long time. It can take longer to get it in. One can give a comparable or a larger dose of pentobarbital more quickly.” HEATH COOEY TESTIMONY at 41, excerpt attached as Exhibit 10. Dr. Heath even went so far as to state that, if states would simply use pentobarbital instead of sodium thiopental “there would be no litigation, or at least I would not participate in the litigation, or I would work for your [the state’s] side to say that I think this is a safe and humane procedure.” HEATH COOEY TESTIMONY at 70, excerpt attached as Exhibit 10.

- g. Dr. Heath, of course, did not testify for Montana when it switched to pentobarbital (as he piously professed he would if only states would use it!!!). Instead, in *Smith* (again on behalf of the inmate) Dr. Heath testified to the exact opposite of his testimony in *Cooey*, claiming that pentobarbital is *not* the “same as” sodium thiopental and is slower. Apparently not aware of Dr. Heath’s *Saar* and *Cooey* testimony, the *Smith* court credited his testimony over the state’s expert, Dr. Evans, because it believed Dr. Heath’s *Smith* testimony was “consistent” with his testimony in certain, undescribed prior cases while Dr. Evans’ allegedly was not. *Smith*, 2015 WL 58827252 at *4. The *Smith* court’s lack of awareness of Dr. Heath’s testimonial prevarication over the years undoubtedly influenced the court to believe that barbiturate classifications are stricter than they really are, and probably changed the outcome of the case. One wonders if the *Smith* court would have

been so enamored of Dr. Heath if it had been aware of the sweeping inconsistencies in his testimony over the years and the widespread rejection of his opinions and testimony as a basis for holding a lethal injection protocol unconstitutional or for staying an execution by courts.¹

¹ *Durr v. Strickland*, 602 F.3d 789 (6th Cir. 2010)(Heath testimony alleging inmate suffered from allergy to anesthetic was not sufficiently convincing to warrant stay of execution); *Cooey et al. v. Strickland*, 589 F.3d 210 (6th Cir. 2009)(Heath testimony focusing on risks of improper implementation of Ohio protocol did not raise constitutionally significant concerns warranting a stay of execution); *Grayson v. Allen*, 491 F.3d 1318 (11th Cir. 2007)(Heath testimony failed to present sufficient evidence to prevent dismissal of inmate's claim as untimely filed); *Taylor v. Crawford*, 487 F.3d 1072 (8th Cir. 2007)(Heath testimony failed to convince court to hold written method of execution protocol unconstitutional); *Workman v. Bredesen*, 486 F.3d 896 (6th Cir. 2007)(Heath affidavit did not establish likelihood of inmate's success on the merits of motion to suspend his execution); *Brown v. Beck*, 445 F.3d 752 (4th Cir. 2006)(Heath testimony not persuasive enough to secure injunction enjoining inmate's execution); *Cooper v. Rimmer*, 358 F.3d 655 (9th Cir. 2004)(Heath testimony failed to show that lethal injection procedure involved an unnecessary risk of unconstitutional pain or suffering as would warrant stay of execution); *Brown v. Crawford*, 408 F.3d 1027 (8th Cir. 2005)(Heath affidavit failed to convince court to stay inmate's execution); *Cooey et al. v. Strickland*, 2010 WL 1610608 (S.D.Ohio)(Heath failed to convince trial court that plaintiff Durr's alleged anesthetic allergy likely to cause pain and suffering); *Cooey et al. v. Strickland*, 2009 WL 4842393 (S.D.Ohio)(Heath testimony failed to persuade trial court of a substantial likelihood that plaintiff Biros would succeed on the merits of his claim challenging constitutionality of Ohio's lethal injection protocol as would warrant stay of execution); *Cooey et al. v. Strickland*, 610 F.Supp.2d 853 (S.D.Ohio 2009)(Heath testimony failed to demonstrate that plaintiff Biros was likely to succeed on his claim that Ohio's method of execution protocol was constitutionally flawed); *Grayson v. Allen*, 499 F.Supp.2d 1228 (M.D.Ala. 2007)(Heath testimony failed to demonstrate that inmate was entitled to a stay of execution); *Hankins v. Quarterman*, 2007 WL 959040 (N.D.Tex.)(Heath testimony "fell short of showing that the inmate was subject to an unnecessary risk of unconstitutional pain"); *Morales v. Hickman*, 415 F.Supp.2d 1037 (N.D.Cal. 2006)(despite Heath testimony, court found protocol constitutional so long as protocol was amended to include consciousness check); *Evans v. Saar*, 412 F.Supp.2d 519 (D.Md. 2006)(Heath testimony failed to establish that state's three-drug protocol constituted cruel and unusual punishment as would support inmate's motion for a TRO); *Beardslee v. Woodford*, 2005 WL 40073 (N.D.Cal.)(Heath testimony insufficient to demonstrate any reasonable possibility that inmate would be conscious after injection with sodium thiopental); *Reid v. Johnson*, 333 F.Supp.2d 543 (E.D.Va. 2004)(Heath testimony failed to establish that inmate was likely to suffer irreparable harm as a result of state's protocol for carrying out death sentence by lethal injection); *Harris v. Johnson*, 376 F.3d 414 (S.D.Tex. 2004)(reversing stay entered by trial court); *Ringo v. Lombardi*, 2011 WL 2584476 (W.D.Mo.)(finding that Heath's testimony concerning the use of non-medical personnel to push the IV and the use of drugs without a prescription failed to demonstrate that the inmate would suffer an injury in fact); *Baker v. Saar*, 402 F.Supp.2d 606 (D.Md. 2005)(Heath testimony did not warrant stay of execution); *Nooner v. Norris*, 2008 WL 3211290 (E.D.Ark. 2008)(Heath failed to convince court to stay execution); *In re: Lewis Williams*, 359 F.3d 811 (6th Cir. 2004)(inmate not entitled to stay of

h. While Rhines' current expert, Dr. Craig Stevens, lacks Dr. Heath's breadth of experience, he does not appear to lack the zeal for distorting science in service of thwarting the implementation of the death penalty. In one of the 5 death penalty cases he appears to have participated in to date, the court ruled that he had filed a "sham" report, describing the report's methodological flaws in exacting detail. *Loden v. State*, 264 So.3d 707, 711-12 (Miss. 2019). Another court simply dismissed his testimony because he had failed to "cite probative support for his conclusions" about midazolam. *Jordan v. State*, 266 So.3d 986 (Miss. 2018).

Dr. Heath's tactic in *Smith* (and basically all cases in which he testifies), is to assert that a state should be using the drug it *doesn't* have. When Ohio had sodium thiopental, Dr. Heath claimed in *Cooey* that pentobarbital was superior; when Montana had pentobarbital, Dr. Heath claimed sodium thiopental was superior. Dr. Heath is an avowed anti-death penalty zealot whose testimonial track record reveals more

execution based on Heath affidavit); *Malicoat v. State*, 137 P.3d 1234 (Ct.App.Ok. 2006) (denying stay notwithstanding Heath affidavit's criticism of protocol); *Broom v. Jenkins*, 2019 WL 1299846 (D.Ct.N.D.Ohio)(denying leave to amend complaint based on claim that inmate could not be executed because it was not possible to access a vein and rejecting Dr. Heath's claim that execution team was "incompetent"); *Asay v. Florida*, 224 So.3d 695 (Fla. 2017) (rejecting Dr. Heath's testimony that use of etomidate in an execution posed a substantial risk of harm to the inmate); *Ringo v. Roper*, 766 F.3d 880 (8th Cir. 2014)(denying stay of execution despite Dr. Heath's testimony against use of midazolam in execution); *Muhammad v. Florida*, 132 So.3d 176 (Fla. 2013) and *Muhammad v. Florida*, 739 F.3d 683 (11th Cir. 2014) (denying stay of execution despite Dr. Heath's testimony against use of midazolam in execution); *Pardo v. Florida*, 108 So.3d 558 (Fla. 2012) and *Pardo v. Palmer*, 2012 WL 6106331 (D.Ct.Fla.) (denying stay of execution over Dr. Heath's assertion that pentobarbital would not sufficiently anesthetize the inmate against subsequent drugs in the protocol); *Thorson v. Epps*, 2011 WL 13177527 (D.Ct.N.D.Miss.)(affirming use of pentobarbital in lieu of sodium thiopental contrary to Dr. Heath's testimony that pentobarbital would not adequately anesthetize inmate).

devotion to that cause than to objective medical science. HEATH RHINES TESTIMONY at 63/5-67/10, excerpt attached as Exhibit 8; HEATH SMITH DEPOSITION at 13/12, excerpt attached as Exhibit 11 (Dr. Heath wrote of his "strong opposition to the imposition of the death penalty")

19. Eyewitness accounts of executions conducted in South Dakota confirm that, as Dr. Heath himself has reported, pentobarbital is the "same as" sodium thiopental:
 - a. During the execution of Elijah Page (who tortured Chester Poage for hours – beating and kicking him, poisoning him, stabbing him, drowning him and ultimately beating his skull in with a rock), Warden Weber and other witnesses reported that the execution was performed "like clockwork" and that "it was just a matter of seconds" after the administration of sodium thiopental that Page started "snoring, and his chest heaved a couple times." WEBER 23AUG10 AFFIDAVIT at ¶ 7, Exhibit 12. Page's "death occurred within a matter of minutes." WEBER 23AUG10 AFFIDAVIT at ¶ 10, Exhibit 12.
 - b. As with Page, Eric Robert (who bludgeoned Correctional Officer Ron Johnson with a lead pipe, breaking his bones, amputating a finger, cracking his skull open and exposing his brain before suffocating him with plastic wrap) was "conscious for only 45 seconds" following the administration of a massive dose of pentobarbital. Robert "expelled his last breath approximately 90 seconds" after administration of the

drug. "Robert exhibited virtually no signs of pain or physical distress during either the seconds he remained conscious after the injection commenced or during the period of unconsciousness before he died.

WEBER 22OCT12 AFFIDAVIT at ¶¶ 3, 4, Exhibit 13.

- c. During the execution of Donald Moeller (who kidnapped, beat, stabbed, raped and cut the throat of 9-year-old Becky O'Connell), Moeller uttered a final sentence about 30 seconds after the warden signaled to commence the administration of the drugs. Moeller lost consciousness about 15 seconds later and "expelled a few last deep breaths approximately 60 seconds after [the warden] signaled to commence the injection." WEBER 1NOV12 AFFIDAVIT at ¶ 4, Exhibit 14. Media witnesses described the process as "very quick" and that Moeller was "gone" in "a matter of [a] minute." WEBER 1NOV12 AFFIDAVIT at ¶ 5, Exhibit 14.

The performance of pentobarbital during the executions of Robert and Moeller conform to Dr Heath's description in *Saar* of the performance of sodium thiopental in an execution setting – that sodium thiopental will produce death in 60 seconds. HEATH SAAR TESTIMONY at 70/16, 71/13, excerpt attached as Exhibit 9.

20. Which brings us to the debacle of facile statutory construction and result-oriented reasoning that is the *Smith* decision. As here, the inmate in *Smith* claimed that the use of pentobarbital for his execution did not conform to a statute requiring an "ultrashort-acting barbiturate."

Applying a literal interpretation of the statute and rigid approach to general barbiturate classifications, the *Smith* court agreed and shamefully enjoined the use of pentobarbital for the execution of a vicious killer.²

- a. The *Smith* court's decision rests on the central fallacy that the classification or performance of an ultrashort-acting barbiturate that the legislature had in mind was according to its use "in a clinical setting." Courts have consistently rejected the proposition that an execution is a medical procedure subject to medical or clinical standards.³ In *Baze v. Rees*, 553 U.S. 35, 60 (2008), rejected the application of medical standards of practice to the execution context.

² *State v. Smith*, 705 P.2d 1087 (Mont. 1985) ("On August 4, 1982, defendant kidnapped and killed Harvey Mad Man, Jr., and Thomas Running Rabbit, Jr., at a remote location near U.S. Highway 2, west of the eastern border of Flathead County. On August 3, 1982, the defendant and two companions, Andre Fontaine and Rodney Munro, had departed from Alberta, Canada. The three encountered the two victims, Mad Man and Running Rabbit, at a bar in East Glacier, Montana. While at the bar, the three shot pool and drank beer with Mad Man and Running Rabbit. The three left the bar in East Glacier and hitchhiked west along Highway 2. There had been discussion between the defendant and Andre Fontaine about stealing a car and the need to eliminate any witnesses to the theft. Shortly thereafter, the three men were picked up by Mad Man and Running Rabbit. The men drove for approximate twenty minutes and stopped to allow Mad Man and Running Rabbit to relieve themselves. When the two men got back into the car, the defendant pulled a sawed-off single bolt action .22 rifle, brought illegally into this country, and pointed it at the driver. Munro displayed his knife to the passenger. The defendant and Munro marched the two victims into the trees. The defendant shot Mad Man in the back of the head at point-blank range. He reloaded the rifle, walked several feet to where Thomas Running Rabbit had fallen to the ground upon being stabbed by Munro, and shot him in the temple at point-blank range. Both men were killed instantly. The defendant and the other two then stole the victim's car and proceeded to California").

³ See also *Gregg v. Georgia*, 428 U.S. 153, 173, 96 S.Ct. 2909 (1976)(constitution does not require the use of execution standards that may be medically optimal in other contexts); *Ex parte Aguilar*, 2006 WL 1412666 (Tex.Crim.App. 2006)(doctors do not ordinarily prepare fluids for injection or insert or monitor IV lines in hospital settings); *Taylor v. Crawford*, 487 F.3d 1072, 1083 (8th Cir. 2007)(district court erred when it required state to have physician supervise execution); *Hamilton v. Jones*, 472 F.3d 814, 817 (10th Cir. 2007)(anesthetic monitoring such as is done in a surgical suite is not necessary in the execution chamber given the massive dosages of anesthetic that are administered).

Because medical standards are “drawn from a different context,” they are not applicable in an execution setting. *Baze*, 553 U.S. at 60. See also *Walker v. Johnson*, 448 F.Supp.2d 719, 723 (E.D.Va. 2006)(“execution by lethal injection is not a medical procedure and does not require the same standard of care as one”). Even before *Baze*, *Emmett v. Johnson*, 511 F.Supp.2d 634, 642 (E.D.Va. 2007), ruled that making an “analogy to clinical medical standards in evaluating the methods used for conducting executions is without constitutional basis” because “surgery and execution have the polar opposite medical objectives.” *Emmett*, 511 F.Supp.2d at 642.

- b. For statutes, like SDCL 23A-27A-32, that are written to meet constitutional standards, the analogy to clinical medical standards is equally inapposite. Lethal injection is “designed to ensure a quick, indeed a painless death, and thus there is no need for” standards applicable to “a hospital surgery suite” where the goal “is to ensure that the patient will wake up at the end of the procedure.” *Taylor v. Crawford*, 487 F.3d 1072, 1084 (8th Cir. 2007).
- c. Despite the acknowledged discrepancy between clinical and execution standards, the *Smith* opinion repeatedly referenced clinical sources – testimony from Dr. Heath founded on the performance of “both pentobarbital and thiopental” “in a clinical setting,” “significant research that classifies thiopental as being ultrashort-acting” when used *in a clinical setting*, some 28,600 search engine results

describing sodium thiopental as ultrashort-acting *in a clinical setting*, a package insert classifying pentobarbital that had been manufactured for use *in a clinical setting* as short-acting. *Smith*, 2015 WL 5827252 at *3. *Smith* found clinical-based data such as these to be “[o]f significant import” to its decision. *Smith*, 2015 WL 5827252 at *3.

- d. *Smith*’s premise is flawed at its core. The *Smith* court apparently was oblivious to the then-recent decision of the United States Supreme Court in *Glossip v. Gross*, 135 S.Ct. 2726 (2015), in which the court expressly rejected measuring execution drug performance according to clinical standards. In *Glossip*, the inmate’s expert, applying a clinical standard, opined that midazolam would not serve as a suitable anesthetic. To this Justice Alito replied:

Petitioners emphasize that midazolam is not recommended or approved for use as the sole anesthetic during painful surgery, but there are two reasons why this is not dispositive. First, as the District Court found, the 500-milligram dose at issue here “is many times higher than a normal therapeutic dose of midazolam.” The effect of a small dose of midazolam has minimal probative value about the effect of a 500-milligram dose. Second, the fact that a low dose of midazolam is not the *best* drug for maintaining unconsciousness during surgery says little about whether a 500-milligram dose of midazolam is *constitutionally adequate* for purposes of conducting an execution. We recognized this point in *Baze*, where we concluded that although the medical standard of care might require the use of a blood pressure cuff and an electrocardiogram during surgeries, this does not mean those procedures are required for an execution to pass Eighth Amendment scrutiny.

Glossip, 135 S.Ct. at 2742, excerpt attached as Exhibit 15. Unlike the *Glossip* court, *Smith* failed to appreciate that the Montana legislature

was not prescribing a barbiturate for use in a clinical setting; it was prescribing a drug for use in an execution setting. Comparing one to the other is comparing apples to oranges . . . cheese to chalk . . . donuts to dumptrucks. *Glossip*, 135 S.Ct. at 2742, Exhibit 15.

- e. As *Smith* correctly points out, and which is not disputed here, barbiturates are typically classified according to how quickly they wear off. Thus, “ultrashort-acting” and “short-acting” refer *not*, as the names might suggest to a layman, to the time it takes for the barbiturate to act on the system but to how long before it wears off. How *quickly* a barbiturate takes effect is described as “ultrafast-acting” or “fast-acting.” *Smith* found that pentobarbital was short- and fast-acting based on its clinical classification and enjoined its use in *Smith*’s execution. *Smith*, 2015 WL 5827252 at *5.
- f. This was a glaring error. According to *Glossip*, the “probative” question is how a drug will perform in an execution. *Glossip*, 135 S.Ct. at 2742, Exhibit 15. According to *Glossip*, “[t]he relevant question” was whether midazolam was suitable in “the huge dose administered in the Oklahoma protocol.” *Glossip*, 135 S.Ct. at 2743, Exhibit 15.
- g. *Smith* did not address “[t]he relevant question;” instead it fixed on standards having “minimal probative value” to high-dosage administrations of pentobarbital. *Glossip*, 135 S.Ct. at 2743, Exhibit 15. Clearly the Montana legislature was not contemplating the

clinical classification or properties of the barbiturate that it was prescribing for use in an execution. Prescribing a barbiturate for execution based on a clinical propensity to wear off quickly (ultrashort-acting) would defeat the purpose of the execution. To administer a clinical dosage of sodium thiopental only to have Smith wake up 5-8 minutes later would thwart the purpose of execution and frustrate the statute. Thus, the Montana legislature clearly was not prescribing a barbiturate for execution purposes based on its ultrashort-acting properties in a clinical setting. The legislature clearly contemplated that any drug used would meet the performance criteria of an ultrafast-/ultrashort-acting drug in a high-dosage, execution setting.

- h. In a clinical setting, an ultrafast-/ultrashort-acting barbiturate (according to Rhines' current expert, Dr. Stevens) will take effect "within 10-30" seconds." According to the testimony of Rhines' former expert, Dr. Heath, in *Saar*, an ultrafast-/ultrashort-acting barbiturate will take effect *and* shut down respiration in 60 seconds. According to Dr. Heath's deposition testimony in *Smith*, an ultrafast-/ultrashort-acting barbiturate takes effect in "20 to 30 seconds." HEATH SMITH DEPOSITION at 26/19, Exhibit 11. Elsewhere in his *Smith* testimony, Dr. Heath states that sodium thiopental administered at its "fastest possible" rate would still take "some tens of seconds to transition from full consciousness to full and deep unconsciousness." HEATH SMITH

DEPOSITION at 79/15, Exhibit 11. This is the same as pentobarbital in an execution setting, which, according to Dr. Heath takes effect in “several tens” of seconds, “10, 20, 30” seconds depending on variables like heart rate or how good an inmate’s circulatory system is. HEATH SMITH DEPOSITION at 39/11, Exhibit 11.

- i. Even if a clinical dose of pentobarbital would not act as fast as a clinical dose of sodium thiopental, Dr. Heath admitted in *Smith* that “[i]f one gave a dose [of pentobarbital] higher than, as with most drugs, the more one gives, the more rapidly one sees the effects.” HEATH SMITH DEPOSITION at 30/9, Exhibit 11. According to Dr. Heath, the time it takes to travel from the injection site to the brain is the same for a large or small dose of a drug, but “all drugs that are used to produce sedation and unconsciousness will exert their effects at a more rapid rate if you give more.” HEATH SMITH DEPOSITION at 31/4, Exhibit 11. In other words, high-dosage pentobarbital acts as fast or faster than a clinical dose of sodium thiopental.
- j. Ultimately, it is not necessary to agonizingly extrapolate the matching performance of clinical sodium thiopental and high-dosage pentobarbital from twee comparisons of disparate bits of Dr. Heath’s vacillating testimony in his myriad cases over time. Dr. Heath put a bow on it in his *Smith* deposition testimony; when finally pushed to stop splitting hairs over clinical classifications and speculative administration mishaps, Dr. Heath was forced to admit in *Smith* that

"[i]f proper administration of the drug occurs, *whether it is thiopental or pentobarbital*, if proper administration occurs in the intended multi-gram [execution setting] dose into the circulation and carried to the brain, then there's *no difference between the drugs*, because both will produce deep unconsciousness that will outlast the duration of the execution." HEATH SMITH DEPOSITION at 89/22-90/5, Exhibit 11.

- k. Just as a clinical dose of sodium thiopental would not be effective to perform an execution, it is just as clear that, in the context of an execution, sodium thiopental is *not* an ultrashort-acting barbiturate because it never wears off. In an execution setting, a 3-5 gram dose of sodium thiopental will "outlast the duration of the execution."

HEATH SMITH DEPOSITION at 89/22-90/5, Exhibit 11. *Smith's* literal application of clinical classifications to an execution statute renders the statute inoperable; a clinical dose of sodium thiopental would not be sufficient to produce death, and the duration of effect of a lethal dose places the drug well outside the classification of ultrashort-acting.

1. Like *Glossip*, the *Pavatt* court noted the inherent contradiction of applying a strict clinical classification in an execution setting. *Pavatt* found that it was "not entirely clear" that Oklahoma's statute used the term "ultrashort-acting" in the clinical sense of how short it lasts. *Pavatt*, 627 F.3d at 1340 n. 3. Given that short action is not desirable

in an execution context, the *Pavatt* court sensibly believed that the statute used the term ultrashort-acting “in a different sense, to refer to how quickly the barbiturate takes effect.” *Pavatt*, 627 F.3d at 1340 n. 3. The *Pavatt* court’s observation makes sense given the 8th Amendment mandate to eliminate to the extent possible any conscious suffering secondary to cessation of respiration.

m. Likewise, in *Owens v. Hill*, 758 S.E.2d 794, 802 (Ga. 2014), the court rejected the clinical mainstay of sterilized drugs as having any application in an execution setting. “[S]terility is simply a meaningless issue in an execution where, as the record showed, unconsciousness will set in almost instantaneously from a massive overdose of anesthetic, death will follow shortly afterward before consciousness is regained, and the prisoner will never have an opportunity to suffer the negative medical effects from infection or allergic reactions from a possibly non-sterile drug. Particularly unpersuasive is Hill’s expert’s testimony that certain contaminants also could have the following effect: ‘Their blood pressure would drop precipitously, and ultimately its possible that they could die.’ Such a side effect obviously would be shockingly undesirable in the practice of medicine, but it is certainly not a worry in an execution [S]uch a side effect would be irrelevant in an execution inducing nearly instantaneous unconsciousness and the rapid onset of death before consciousness is regained.” *Owens*, 758 S.E.2d at 802.

21. In the *Smith* court's defense, its decision could only be as good as the evidence before it. The decision does not reflect that a *Glossip* argument was squarely presented to the *Smith* court. *Smith*'s focus on clinical classifications in texts, testimony, literature, manufacturer package inserts and other sources, and the fact that *Glossip* is not even mentioned in the opinion, rather affirmatively demonstrates that it was not. But, as *Glossip* found, clinical performance has "minimal probative value;" "the relevant question" is the drug's performance in the dosage administered in an execution. *Glossip*, 135 S.Ct. at 2742. The evidence conclusively demonstrates that execution dosages of pentobarbital meet the classifications of an ultrashort-acting barbiturate.

22. Consistent with *Glossip*, Dr. Joseph Antognini, a distinguished anesthesiologist, describes for the court how a "short-acting" drug can behave like an "ultrashort-acting drug," and *vice-versa*, depending on variables such as dosage or method of administration:

- a. In high dosages "the actions of pentobarbital . . . are consistent with the actions of an ultra-fast acting/ultra-short acting barbiturate that is administered in a large lethal dose." ANTOGNINI REPORT at ¶ 11, Exhibit 16.
- b. Barbiturate "classification is not absolute, and depends in large part on the dose of the drug and the route it is administered (oral versus intravenous)." ANTOGNINI REPORT at ¶ 12, Exhibit 16.

- c. A prevailing textbook at the time of SDCL 23A-27A-32's codification reported that the classifications of barbiturates are "often altered depending on the route of administration (oral versus intravenous) [and] dose." ANTOGNINI REPORT at ¶ 13, Exhibit 16, citing Miller's *Anesthesia* (1st Ed. 1981).
- d. Studies report that classifications of barbiturates are so inexact, "dose-dependent," and archaic that "[i]t is surprising that th[ese] classification[s] still persist in pharmacology textbooks." ANTOGNINI REPORT at ¶¶ 14, 15, Exhibit 16.
- e. A textbook written by Rhines' own expert in this case, Dr. Craig Stevens, demonstrates the fluidity of barbiturate classification. Though Dr. Stevens tells this court that there are only "two ultra-short-acting barbiturates: sodium thiopental and methohexital," his textbook identifies both sodium thiopental *and* pentobarbital as short-acting. ANTOGNINI REPORT at ¶ 16, Exhibit 16, citing Brenner and Stevens, *Pharmacology* at 209, Table 19-1 (2018). A single table in Dr. Stevens' own textbook refutes his two central points: that barbiturate classifications are rigid and "widely accepted" and that sodium thiopental and pentobarbital are different.
- f. Barbiturates can meet different classification criteria depending on dosage. ANTOGNINI REPORT at ¶ 17, Exhibit 16; HEATH SMITH DEPOSITION at 89/22-90/5, Exhibit 11; HEATH COOEY TESTIMONY at 40, excerpt attached as Exhibit 10.

- g. In the execution context, classification of sodium thiopental as “ultra-short acting” is “meaningless” because the drug’s duration of action at that dosage would far exceed the time criterion for that classification. ANTOGNINI REPORT at ¶ 18, Exhibit 16. High dosage, intravenous administration alters pentobarbital’s properties to match those of sodium thiopental in an execution setting. ANTOGNINI REPORT at ¶ 13, Exhibit 16, citing Miller’s Anesthesia (1st Ed. 1981).
- h. As noted in *Smith* and by Dr. Heath, “the purpose of the development of ultra-fast-acting barbiturates” is “a very quick transition from consciousness to unconsciousness.” ANTOGNINI REPORT at ¶ 18, Exhibit 16. “[P]entobarbital at the dose administered in the South Dakota protocol (5 grams) would induce rapid unconscious within 20-30 seconds,” consistent with the classification criteria of an ultrashort-acting barbiturate. ANTOGNINI REPORT at ¶¶ 20, 21, Charts C and D, Exhibit 16.
- i. “[A] drug that is typically considered ‘short-acting’ can be ‘ultra-short acting,” and . . . an ‘ultra-short acting’ drug can be ‘short-acting’ depending on the variable of dosage” and route of administration. ANTOGNINI REPORT at Charts C and D, Exhibit 16. “When a drug is given intravenously, there is typically a vary rapid rise in the concentration A typical clinical dose is the general baseline for classifying drugs as ‘ultrashort-’ or ‘short-acting.’ But, since duration of action is a function of dosage, the classification can change if the

dosage changes.” ANTOGNINI REPORT at Charts C and D, Exhibit

16.

23. Here, the *Smith* decision is more instructive of what *not* to do than *what* to do. “[I]t is . . . a well-established canon of statutory construction that ‘a statute susceptible of more than one meaning must be read in the manner which effectuates rather than frustrates the major purpose of the legislative draftsmen.’” *In re Goerg*, 844 F.2d 1562, 1567 (11th Cir. 1988), quoting *Schultz v. Louisianan Trailer Sales, Inc.*, 428 F.2d 61, 65 (5th Cir. 1970). “[I]n cases where a literal approach would functionally annul the law, the cardinal purpose of statutory construction – ascertain legislative intent – ought not be limited to simply reading a statute’s bare language; we must also reflect upon the purpose of the enactment, the matter sought to be corrected and the goal to be attained.” *State v. Cameron*, 1999 SD 70, ¶ 21, 596 N.W.2d 49, 54, quoting *Desmet Ins. of South Dakota v. Gibson*, 1996 SD 102, ¶ 7, 552 N.W.2d 98, 100.
24. As used in SDCL 23A-27A-32 as codified at the time of Rhines’ conviction, the term “ultrashort-acting barbiturate” is arguably susceptible of two meanings – clinical or lethal. The state would argue that its meaning, in the context of a lethal injection statute, is limited to its properties as a lethal agent, but *Smith* demonstrates that minds can differ. Since “ultrashort-acting barbiturate” is susceptible of two meanings, it must be given a construction here that does not thwart the statute’s purpose or render it an absurdity.

- a. Rhines' interpretation of the statute is absurd for two reasons. First, a clinical dosage of sodium thiopental would not effect death; he would wake up in 5-8 minutes. Second, a lethal dosage of sodium thiopental is *not* ultrashort-acting. As Dr. Heath points out, sodium thiopental in a lethal dose will "outlast the duration of the execution." HEATH SMITH DEPOSITION at 89/22-90/5, Exhibit 11. As Dr. Antognini points out, this duration would exceed the time-criterion for ultrashort-acting. ANTOGNINI REPORT at ¶¶ 18, 20, Chart D, Exhibit 16. Rhines' literal interpretation would annul the statute because no drug could qualify. *Cameron*, 1999 SD 70 at ¶ 21, 596 N.W.2d at 54.
- b. The state's interpretation is both logical and consistent with SDCL 23A-27A-32's purpose. In the context of a lethal injection statute, it makes more sense, as *Glossip* points out, to classify drugs based on their lethal rather than clinical properties. And, as *Pavatt* pointed out, the performance metric of interest to the legislature was not how short the drug lasted but how quickly it took effect. All evidence, Rhines' own especially, demonstrates that pentobarbital acts in an ultrafast manner in an execution setting.
- c. The legislature's intent in drafting SDCL 23A-27A-32 was to meet constitutional standards for execution and therefore must be interpreted in light of the numerous cases which have held that there is no constitutional difference between sodium thiopental and

pentobarbital. If there is no constitutional difference, there is no statutory difference.

25. Rhines cannot demonstrate a “significant possibility” of succeeding on the merits of his claim. *Hill*, 547 U.S. at 584.

a. The claim is barred by *res judicata* because Rhines could have litigated this claim in the method of execution litigation before Judge Trimble in 2011. As noted just days ago by the South Dakota Supreme Court, Rhines’ complaint for declaratory judgment and injunctive relief before Judge Trimble “argued that the state’s protocols violated due process” and that the issue of the process due Rhines under SDCL 23A-27A-32 as codified on the date of his conviction was “fully litigated during a court trial, which included expert medical testimony.” *Rhines v. S.D. Dept. of Corrections*, 2019 SD 59, ¶ 3. The Supreme Court noted that the “circuit court reviewed the parties’ evidence” and “made detailed findings of fact.” *Rhines*, 2019 SD 59 at ¶ 4. Rhines filed a motion to appeal Judge Trimble’s ruling but the Supreme Court “denied his motion, concluding that he had not demonstrated probable cause that an appealable issue existed.” *Rhines*, 2019 SD 59 at ¶ 4. Rhines had a full and fair opportunity to litigate the state’s alleged non-compliance with the process allegedly due him in his then-pending complaint for declaratory and injunctive relief. Though Rhines certainly could have, he did not take advantage of that opportunity to litigate this aspect of

the method of his execution. There has been a final judgment rendered on the process due Rhines under the statute. *Rhines*, 2019 SD 59 at ¶ 4. Consequently, Rhines' claims are firmly barred by principles of *res judicata*. *Lippold v Meade Co. Bd. of Comm.*, 2018 SD 7, ¶ 28, 906 N.W.2d 917, 925.

- b. Nor can Rhines prevail on the substance of his claims. Rhines' gimmick of applying clinical standards to the execution setting has been rejected by the United States Supreme Court in *Baze* and *Glossip*. Rhines' clinical interpretation of SDCL 23A-27A-32 would render the statute a nullity. Given the 8th Amendment constraints that necessarily guide the legislature's actions in this context, the legislature's selection of an ultrashort-acting barbiturate obviously was driven by the speed with which the drug took effect, not by how quickly it wears off. *Pavatt*, 627 F.3d at 1340 n. 3.
- c. As Dr. Antognini points out, drugs can cross back and forth between classification boundaries depending on the method of administration and dosage given. Sodium thiopental administered in a low dosage at a slow rate would take effect slowly and wear off over a longer period of time; as such it could be considered slow-acting in terms of onset and short- or intermediate-acting in terms of duration. Pentobarbital administered in a massive dosage takes effect as fast as sodium thiopental or any other drug in the ultrashort-acting classification.

ANTOIGNINI REPORT at ¶¶ 12, 16, 18, 20, Charts C and D, Exhibit 16.

- d. According to Rhines' own expert in the case before Judge Trimble, "there's *no difference between the drugs*." HEATH SMITH DEPOSITION at 89/22-90/5, Exhibit 11. Indeed, when Dr. Heath was on the warpath against sodium thiopental in the *Cooey* case, he stated that "[o]ne can give a comparable or a larger dose of pentobarbital more quickly" than sodium thiopental. HEATH COOEY TESTIMONY at 41, excerpt attached as Exhibit 10. Given the United States Supreme Court's preference for measuring an execution drug's performance according to high-dosage metrics, the South Dakota Supreme Court's approval of the protocol as codified on the date of Rhines' conviction 27 years ago, and the intrinsic absurdity of applying clinical standards to a non-therapeutic process, Rhines stands no realistic chance of succeeding on the merits of his claim.

iii. Delay

26. "Given the state's significant interest in enforcing its criminal judgments, there is a strong equitable presumption against the grant of a stay where a claim could have been brought at such a time as to allow consideration of the merits without requiring entry of a stay." *Nelson*, 541 U.S. at 650. "[A] plaintiff cannot wait until a stay must be granted to enable him to develop facts and take the case to trial – not when there is no satisfactory explanation for the delay." *Sepulvado v. Jindal*, 729 F.3d 413, 420 (5th

Cir. 2013), quoting *Reese v. Livingston*, 453 F.3d 289, 291 (5th Cir. 2006). A prisoner is not entitled to a stay in order to conduct discovery to make out a claim. *Beaty v. Brewer*, 649 F.3d 1071, 1075 (9th Cir. 2011).

27. Courts have often refused to grant a dilatory stay sought on the eve of an execution. For example, in *Ledford* the court denied a stay despite the fact that the inmate's claims were not necessarily barred by the statute of limitations because he had not been timely in waiting until five days before his execution to raise his claim. *Ledford*, 856 F.3d at 1315; *Crowe v. Donald*, 528 F.3d 1290, 1292 (11th Cir. 2008); *Diaz v. McDonough*, 472 F.3d 849, 851 (11th Cir. 2006); *Hill v. McDonough*, 464 F.3d 1256, 1259-60 (11th Cir. 2006). Also, in *Jones v. Allen*, 485 F.3d 635 (11th Cir. 2007), an inmate facing imminent execution filed a last-minute challenge to Alabama's protocol, which had been adopted four years earlier. The *Allen* court concluded that the inmate's delay "leaves little doubt that the real purpose behind his claim is to seek a delay of his execution, not merely to effect an alteration of the manner in which it is carried out." *Jones*, 485 F.3d at 640.

28. Similarly, here, South Dakota identified pentobarbital as one of two ultrashort-acting barbituates that would be used in its two-drug protocol 8 years ago. Yet, only 11 days from the week set for his execution, Rhines raises this challenge for the first time.

29. Rhines has failed to show any equitable basis for excusing his delay under these circumstances. *Ledford*, 856 F.3d at 1312. He has been

sentenced to death for 26 years and, only now, with his execution imminent, has he decided to challenge this aspect of the procedure for lethal injection that the state has had in place for the last 8 years.

Jones, 485 F.3d at 640.

30. Though the *Smith* case held a full trial on the inmate's statutory compliance claim, the significant difference between this case and *Smith* is that *Smith* did not wait until the last minute to bring his claim. A year ago Rhines, through the same lawyers that represent him here, brought a claim challenging the enactment of the policy on the grounds that it had not been promulgated by the APA. He should have brought this claim a year ago as well. Indeed, if Rhines thought this claim had any genuine merit, he *would* have brought it a year ago. The value in bringing it now is not to ultimately win, but just to obtain a stay.
31. This sort of last-minute, stay-baiting litigation is extremely prejudicial to the state because it forces the state to assemble a hasty defense and inhibits the state from marshalling its full best evidence against the claim. It prejudices the state's and victims' interests in Rhines serving his overdue sentence.
32. The injustice of further delay is a particularly intolerable here considering that, because of his violent criminal history, Rhines would have been sentenced to life in prison for the burglary and his first, non-fatal stab wound to Donnivan Schaeffer's stomach. Rhines' capital sentence is his punishment for pounding a hunting knife into the base of

Donnivan Schaeffer's skull and killing him. But so far, all he has served is life in prison, the same sentence he would be serving if he had walked out after stabbing Donnivan just once and let him live. In other words, he has not yet been punished for murdering Donnivan. It is time for him to be punished for this killing. Equity howls against delay in this case.

CONCLUSION

Because Rhines has failed to meet his burden of persuasion with a clear showing that law and equity favor his request for a stay of execution, his last-minute motion must be denied.

Dated this 28th day of October 2019.

JASON R. RAVNSBORG
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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this 27th day of October 2019 a true and correct copy of the foregoing response in opposition to plaintiff's motion for permanent injunction, temporary restraining order and stay of execution was served on Daniel R. Fritz via e-mail to fritzd@ballardspahr.com.

Paul S. Swedlund
Paul S. Swedlund
ASSISTANT ATTORNEY GENERAL

STATE OF SOUTH DAKOTA
COUNTY OF PENNINGTON

CHARLES R. RHINES

Petitioner,

vs.

DOUGLAS WEBER, Warden, South
Dakota State Penitentiary,

Respondent.

IN CIRCUIT COURT
SEVENTH JUDICIAL CIRCUIT

CIV. 02-924

NOTICE OF ADOPTION OF
REVISED EXECUTION POLICY
AND PROTOCOL

Respondent Douglas Weber, by and through his counsel Paul S. Swedlund, Assistant Attorney General for the State of South Dakota, hereby files notice, as earlier requested by this court, of the method of execution policy and protocol prepared and adopted by respondent for use in the executions by lethal injection of condemned inmates in the State of South Dakota, including Charles R. Rhines. Respondent adopted this policy and protocol on October 19 and 13, 2011 respectively. The policy and protocol are modeled on, and are substantially similar to, one approved by the United States Supreme Court in *Baze v. Rees*, 553 U.S. 35, 128 S.Ct. 1520 (2008).

Respectfully submitted,

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FILED
IN CIRCUIT COURT

OCT 24 2011

Ranee Truman, Clerk of Courts
By _____ Deputy



CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this 21st day of October 2011 a true and correct copy of the foregoing notice of adoption of revised execution policy and protocol was served by United States mail, first class, postage prepaid, on Jana Miner, Assistant Federal Public Defender, 101 South Pierre Street, Pierre, SD 57501.



Paul S. Swedlund
ASSISTANT ATTORNEY GENERAL

Pennington County, SD
FILED
IN CIRCUIT COURT
OCT 24 2011

Ranae Truman, Clerk of Courts
By  Deputy

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ERM A.12(B) Capital Punishment Final Days Procedures

A. GENERAL

1. The punishment of death shall be inflicted within the walls of a building at the State Penitentiary. SDCL §23A-27A-32, 23A-27A-33. The South Dakota State Penitentiary (hereinafter SDSP) shall provide all proper equipment and appliances for the infliction of such punishment. SDCL §23A-27A-32, 23A-27A-33. The necessary setup includes a room, hereinafter referred to as the "Chemical Room," equipped with a one-way mirror that allows occupants to observe the Execution Chamber and the Inmate after he is strapped to a gurney in the execution chamber.
2. Death shall be inflicted by administering intravenous injections of a substance or substances in a lethal quantity. The substance or substances and manner of execution shall be and remain consistent with state and federal constitutional requirements as identified herein.
3. The Warden or designee is responsible for having the chemicals for lethal injection and any other necessary items for use on the scheduled date of execution. Under the direction of the Warden or designee two complete sets of the substance or substances used to conduct an execution shall be kept in separate secure locations.
4. The Warden shall arrange for the attendance of South Dakota Department of Corrections (hereinafter SDDOC) staff, law enforcement officers and other persons he/she deems necessary and proper to perform the functions involved in conducting a scheduled execution. This shall include all those required by South Dakota statute to attend.
5. If at any time during the execution process the Governor stays, pardons, or commutes the sentence of the condemned person or if a court of competent jurisdiction issues a stay after an execution has commenced, the execution team shall stop the execution. Ambulance staff equipped with advanced life support capabilities, including a heart defibrillator and such supplies and equipment as would be needed to attempt to revive an individual who has been injected with one or more of the substances identified in Section D, shall be on standby at the SDSP.

B. QUALIFICATIONS OF EXECUTION TEAM MEMBERS

1. An execution carried out by intravenous injection shall be performed by person(s) trained to perform venipuncture and to administer intravenous injections. The person(s) shall be selected by the Warden and approved by the Secretary of Corrections. SDCL 23A-27A-32.
2. The person(s) selected by the Warden to mix the drugs and prepare the syringes shall demonstrate proficiency through relevant training and two years' experience in the preparation of syringes for intravenous administration and mixing and preparation of drugs for such administration.
3. The person(s) selected by the Warden to insert the intravenous needles into the veins of the prisoner and connect, monitor, and maintain intravenous lines shall be certified or licensed and have at least two (2) years' professional experience as one of the following: medical or osteopathic physician, physician assistant, registered nurse, certified medical assistant, licensed practical nurse, phlebotomist, paramedic, emergency medical technician, or military corpsman.
4. The person(s) selected by the Warden to administer the injections shall demonstrate proficiency through relevant training and two years' experience in the administration of drugs by intravenous injection.

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C. PREPARATION OF CHEMICALS

1. The following identifies the contents of each syringe used in the course of the 3-Drug or 2-Drug executions.

SYRINGE LABELED/MARKED	CONTENTS
#1	Sodium Thiopental (1.5 grams in a 60 cc solution) or Pentobarbital (2.5 grams in a 50 cc solution)
#2	Sodium Thiopental (1.5 grams in a 60 cc solution provided Syringe #1 is also 1.5 grams of Sodium Thiopental in a 60 cc solution) or Pentobarbital (2.5 grams in a 50 cc solution provided Syringe #1 is also 2.5 grams of Pentobarbital in a 50 cc solution)
#3	Normal Saline (25 ml)
#4	Pancuronium Bromide (100 mg of 2 mg/ml concentration in a 50 cc solution)
#5	Normal Saline (25 ml)
#6	Potassium Chloride (120 mEq. in a 60 cc solution)
#7	Potassium Chloride (120 mEq. in a 60 cc solution)
Backup syringes (if needed):	
#8	Normal Saline (25 ml)
#9	Sodium Thiopental (1.5 grams in a 60 cc solution) or Pentobarbital (2.5 grams in a 50 cc solution)
#10	Sodium Thiopental (1.5 grams in a 60 cc solution provided Syringe #1 is also 1.5 grams of Sodium Thiopental in a 60 cc solution) or Pentobarbital (2.5 grams in a 50 cc solution provided Syringe #1 is also 2.5 grams of Pentobarbital in a 50 cc solution)
#11	Normal Saline (25 ml)
#12	Pancuronium Bromide (100 mg of 2 mg/ml concentration in a 50 cc solution)
#13	Normal Saline (25 ml)
#14	Potassium Chloride (120 mEq. in a 60 cc solution)
#15	Potassium Chloride (120 mEq. in a 60 cc solution)

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2. The following identifies the contents of each syringe used in the course of the 1-Drug execution using Sodium Thiopental.

SYRINGE LABELED/MARKED	CONTENTS
#1	Sodium Thiopental (1.25 grams in a 50 cc solution)
#2	Sodium Thiopental (1.25 grams in a 50 cc solution)
#3	Sodium Thiopental (1.25 grams in a 50 cc solution)
#4	Sodium Thiopental (1.25 grams in a 50 cc solution)
#5	Normal Saline (25 ml)
Backup syringes (if needed):	
#6	Sodium Thiopental (1.25 grams in a 50 cc solution)
#7	Sodium Thiopental (1.25 grams in a 50 cc solution)
#8	Sodium Thiopental (1.25 grams in a 50 cc solution)
#9	Sodium Thiopental (1.25 grams in a 50 cc solution)

3. The following identifies the contents of each syringe used in the course of the 1-Drug execution using Pentobarbital.

SYRINGE LABELED/MARKED	CONTENTS
#1	Pentobarbital (2.5 grams in a 50 cc solution)
#2	Pentobarbital (2.5 grams in a 50 cc solution)
#3	Normal Saline (25 ml)
Backup syringes (if needed):	
#4	Pentobarbital (2.5 grams in a 50 cc solution)
#5	Pentobarbital (2.5 grams in a 50 cc solution)

4. Any person sentenced to death prior to July 1, 2007, may choose to be executed by the 3- or 1-Drug protocol set forth in this document, provided the SDDOC possesses the necessary substance or substances for the method chosen at the time scheduled for the inmate's execution, or in the manner provided by South Dakota law at the time of the person's conviction (2-Drug protocol set forth in this document). Any person sentenced to death prior to July 1, 2007, shall be executed using the 3- or 1-Drug protocol provided in this document using the substance or substances in the SDDOC's possession unless the inmate requests in writing to the Warden not less than seven (7) days prior to the scheduled execution date that the inmate wishes to be executed by the 2-Drug protocol set forth herein in accordance with South Dakota law as it existed prior to July 1, 2007.

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5. For any inmate sentenced to death after July 1, 2007, the Warden shall elect the method of execution from one of the foregoing 3-, 2-, or 1-Drug methods for which the SDDOC possesses the necessary substance or substances at the time scheduled for the inmate's execution. The Warden will give consideration to, and make the effort to accommodate, the inmate's method of preference, provided the inmate selects 3-, 2-, or 1-Drug methods for which the SDDOC possesses the necessary substance or substances at the time scheduled for the inmate's execution.

D. PREPARATION FOR EXECUTION

1. The SDDOC staff selected to participate in the execution shall drill at least weekly for six to eight weeks prior to the scheduled date of execution. The warden shall schedule additional drills the week of the scheduled execution.
2. Not less than seven (7) days prior to the execution week announced in the Warrant of Death Sentence and Execution, a physician or other medical professional qualified to assess venous access shall examine the inmate. A written report shall be prepared describing the inmate's physical condition and any medical condition of the inmate that may lead to potential problems establishing an IV site. This report, along with a copy of the lethal injection protocol, shall be provided to the executioner(s) for review and consideration no later than one day before the scheduled date of execution.
3. All substances will be mixed or prepared as necessary no more than 8 hours prior to the execution and shall thereafter be maintained in accordance with manufacturers' instructions in temperatures not in excess of 22°C/71.6°F, or such temperature specifically called for by the manufacturer, until ready for use. All substances will be mixed or prepared in bright, un-dimmed light.
4. To provide notification of any last minute stay or appeal, arrangements shall be made to provide direct telephone access between the Warden, the chemical room, the Governor's office, the Chief Justice of the South Dakota Supreme Court or designee, and the Attorney General's office. The Governor, the Chief Justice, and Attorney General or their designees shall be provided with phone numbers to the Warden's office, the chemical room, and multiple backup phone numbers (such as personal cell phone numbers of the Warden and Deputy Warden). In addition, the Warden and Deputy Warden shall be equipped with SDSP issued radios.
5. On the date of the scheduled execution, the prisoner shall be escorted to the execution chamber and strapped to the gurney by the Tie Down Team.
6. On the date of execution, the chemical room shall be kept clear of all persons except for the Executioners, the Warden, and any SDDOC staff selected by the Warden to assist with the execution of the sentence of death.
7. The Tie Down Team Leader shall verify that all restraints are secure and so advise the Warden, at which time the Tie Down Team shall move to the hallway and stand by.
8. The IV team shall enter the chamber and establish two independent IV lines to the inmate's veins. The IV team will establish IV lines only in peripheral veins located in the inmate's arms, hands, legs, or feet, preferably one in each arm. In the event the IV team cannot establish peripheral vein lines, the IV team will establish central vein lines by percutaneous methods, but only if the IV team member establishing the central vein line can demonstrate current training, credentialing, and proficiency in establishing IV lines in central veins by percutaneous methods. The IV team will establish and secure the IV lines in such a way as to leave them visible for monitoring.

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9. The gurney shall at all times be placed so that the inmate's head and face are visible to the Warden and to those in the chemical room. If the inmate desires, and if it will not interfere with the efficacy of the substance or substances being used for the execution, the inmate's head will be propped up by a firm, foam wedge-shaped cushion to better permit IV team members in the chemical room to see the inmate's face during the procedure.
 10. Every effort will be extended to ensure that no unnecessary pain or suffering is inflicted on the inmate.
 11. If the IV team cannot secure one (1) or more sites within one (1) hour, the Governor's Office shall be contacted by the Secretary and a request shall be made that the execution be scheduled for a later date during the week of the execution, as set forth in the Warrant of Death Sentence and Execution.
 12. The IV team shall start a saline flow and a sufficient quantity of saline solution shall be injected to confirm that the IV lines have been properly inserted and are not obstructed. IV team members will continue to monitor IV functioning from within the chemical room.
- E. INJECTION PROCEDURES—3 DRUG PROTOCOL**
1. The Warden shall make a final check with those authorities cited in Section D(4) to ensure no last minute appeals or stays have been filed.
 2. Upon completion of preparation for execution (D. above), the Warden or designee shall order that blinds in front of witness rooms be opened and that the microphone in front of the inmate's mouth be turned on. The Warden or designee shall ask the prisoner if he/she has any last words to say. Upon completion of the prisoner's last words, or in the discretion of the Warden, the Warden shall order that the execution proceed.
 3. Upon the Warden's order to proceed, a designated team member will begin a rapid flow of lethal chemicals in the following order.
 4. Syringe #1
 5. Syringe #2
 6. Syringe #3
 7. If it appears to the Warden that the prisoner is not unconscious within three (3) minutes after administration of the sodium thiopental or pentobarbital, the Warden shall order the flow of chemicals ceased into the primary site. The backup IV shall be used with a new flow of sodium thiopental or pentobarbital.
 8. The Warden and IV team shall assess and monitor the inmate's lack of consciousness by using all steps in a graded consciousness check – a sequence of increasingly strong stimulations to assess consciousness – starting with checking for movement, eyelash reflex, response to verbal commands and culminating in a physical stimulation that would be painful if the inmate were awake. If possible, a currently certified EMT or other medical professional qualified in assessing consciousness, whose identity may, at the Warden's discretion, remain confidential, will be in the execution chamber with the Warden to assist the Warden in determining that the inmate is unconscious following the injection of the sodium thiopental or pentobarbital and prior to the administration of the pancuronium bromide and potassium chloride.

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9. The Warden and IV team shall continuously monitor the IV and infusion sites. If the inmate appears unconscious three (3) minutes after the initial or backup flow of sodium thiopental or pentobarbital is complete, the executioner(s) shall commence the rapid flow of the remaining chemicals as follows.
 10. Syringe #4
 11. Syringe #5
 12. Syringe #6
 13. Syringe #7
 14. Ten (10) minutes after the third drug is administered, the person(s) responsible for pronouncing death shall examine the inmate in order to confirm death by checking the inmate's heartbeat, breathing, pulse and pupils. If the inmate's death is confirmed, the person(s) shall inform the Warden. If that person(s) is unable to confirm the inmate's death, the Warden shall order injection of the remaining backup syringes.
 15. Once the person(s) responsible for pronouncing death has confirmed the inmate's death, the Warden shall announce "At approximately _____ a.m./p.m. the execution of [inmate's name] was carried out in accordance with the laws of the State of South Dakota" or a similar statement to that effect.
 16. The microphone shall be turned off and the curtains/blinds shall be drawn.
 17. The witnesses shall be escorted out of the witness rooms and shall sign the Certificate of Execution as required by South Dakota law.
- F. INJECTION PROCEDURES—2 DRUG PROTOCOL**
1. The Warden shall make a final check with those authorities cited in Section D(4) to ensure no last minute appeals or stays have been filed.
 2. Upon completion of preparation for execution (D. above), the Warden or designee shall order that blinds in front of witness rooms be opened and that the microphone in front of the inmate's mouth be turned on. The Warden or designee shall ask the prisoner if he/she has any last words to say. Upon completion of the prisoner's last words, or in the discretion of the Warden, the Warden shall order that the execution proceed.
 3. Upon the Warden's order to proceed, a designated team member will begin a rapid flow of lethal chemicals in the following order.
 4. Syringe #1
 5. Syringe #2
 6. Syringe #3
 7. If it appears to the Warden that the prisoner is not unconscious within three (3) minutes after administration of the sodium thiopental or pentobarbital the Warden shall order the flow of chemicals ceased into the primary site. The backup IV shall be used with a new flow of sodium thiopental or pentobarbital.

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8. The Warden and IV team shall assess and monitor the inmate's lack of consciousness by using all steps in a graded consciousness check -- a sequence of increasingly strong stimulations to assess consciousness -- starting with checking for movement, eyelash reflex, response to verbal commands and culminating in a physical stimulation that would be painful if the inmate were awake. If possible, a currently certified EMT or other medical professional qualified in assessing consciousness, whose identity may, at the Warden's discretion, remain confidential, will be in the execution chamber with the Warden to assist the Warden in determining that the inmate is unconscious following the injection of the sodium thiopental or pentobarbital and prior to the administration of the pancuronium bromide and potassium chloride.
 9. The Warden and IV team shall continuously monitor the IV and infusion sites. If the inmate appears unconscious three (3) minutes after the initial or backup flow of sodium thiopental or pentobarbital is complete, the executioner(s) shall commence the rapid flow of the remaining chemicals as follows.
 10. Syringe #4
 11. Syringe #5
 12. Ten (10) minutes after the second drug is administered, the person(s) responsible for pronouncing death shall examine the inmate. The person(s) responsible for pronouncing death shall enter the chamber and confirm death by checking the inmate's heartbeat, breathing, pulse and pupils. If that person(s) is not able to pronounce death, the Warden shall order injection of the remaining backup syringes.
 13. Once the person(s) responsible for pronouncing death has confirmed the inmate's death, the Warden shall announce "At approximately _____ a.m./p.m. the execution of [inmate's name] was carried out in accordance with the laws of the State of South Dakota" or a similar statement to that effect.
 14. The microphone shall be turned off and the curtains/blinds shall be drawn.
 15. The witnesses shall be escorted out of the witness rooms and shall sign the Certificate of Execution as required by South Dakota law.
- G. INJECTION PROCEDURES -- 1 DRUG PROTOCOL (Sodium Thiopental)
1. The Warden shall make a final check with those authorities cited in Section D(4) to ensure no last minute appeals or stays have been filed.
 2. Upon completion of preparation for execution (D. above), the Warden or designee shall order that blinds in front of witness rooms be opened and that the microphone in front of the inmate's mouth be turned on. The Warden or designee shall ask the prisoner if he/she has any last words to say. Upon completion of the prisoner's last words, or in the discretion of the Warden, the Warden shall order that the execution proceed.
 3. Upon the Warden's order to proceed, a designated team member will begin a rapid flow of lethal chemicals in the following order.
 4. Syringe #1
 5. Syringe #2
 6. Syringe #3
 7. Syringe #4
 8. Syringe #5

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9. Ten (10) minutes after the drug is administered, the person(s) responsible for pronouncing death shall examine the inmate. The person(s) responsible for pronouncing death shall enter the chamber and confirm death by checking the inmate's heartbeat, breathing, pulse and pupils. If that person(s) is not able to pronounce death, the Warden shall order a second set of chemicals to be administered in the following order.
10. Syringe #6
11. Syringe #7
12. Syringe #8
13. Syringe #9
14. Ten (10) minutes after the second round of the drug is administered, the person(s) responsible for pronouncing death shall again examine the inmate. The person(s) responsible for pronouncing death shall enter the chamber and confirm death by checking the inmate's heartbeat, breathing, pulse and pupils.
15. Once the person(s) responsible for pronouncing death has confirmed the inmate's death, the Warden shall announce "At approximately _____ a.m./p.m. the execution of [inmate's name] was carried out in accordance with the laws of the State of South Dakota" or a similar statement to that effect.
16. The microphone shall be turned off and the curtains/blinds shall be drawn.

The witnesses shall be escorted out of the witness rooms and shall sign the Certificate of Execution as required by South Dakota law.

H. INJECTION PROCEDURES – 1 DRUG PROTOCOL (Pentobarbital)

1. The Warden shall make a final check with those authorities cited in Section D(4) to ensure no last minute appeals or stays have been filed.
2. Upon completion of preparation for execution (D. above), the Warden or designee shall order that blinds in front of witness rooms be opened and that the microphone in front of the inmate's mouth be turned on. The Warden or designee shall ask the prisoner if he/she has any last words to say. Upon completion of the prisoner's last words, or in the discretion of the Warden, the Warden shall order that the execution proceed.
3. Upon the Warden's order to proceed, a designated team member will begin a rapid flow of lethal chemicals in the following order.
4. Syringe #1
5. Syringe #2
6. Syringe #3

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7. Ten (10) minutes after the drug is administered, the person(s) responsible for pronouncing death shall examine the inmate. The person(s) responsible for pronouncing death shall enter the chamber and confirm death by checking the inmate's heartbeat, breathing, pulse and pupils. If that person(s) is not able to pronounce death, the Warden shall order a second set of chemicals to be administered in the following order.
8. Syringe #4
9. Syringe #5
10. Ten (10) minutes after the second round of the drug is administered, the person(s) responsible for pronouncing death shall again examine the inmate. The person(s) responsible for pronouncing death shall enter the chamber and confirm death by checking the inmate's heartbeat, breathing, pulse and pupils.
11. Once the person(s) responsible for pronouncing death has confirmed the inmate's death, the Warden shall announce "At approximately _____ a.m./p.m. the execution of [inmate's name] was carried out in accordance with the laws of the State of South Dakota" or a similar statement to that effect.
12. The microphone shall be turned off and the curtains/blinds shall be drawn.

The witnesses shall be escorted out of the witness rooms and shall sign the Certificate of Execution as required by South Dakota law.

Douglas L. Weber

Douglas L. Weber, Chief Warden and Director of Prison Operations

October 13, 2011

Date

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1.3.D.3 Execution of an Inmate

I Policy Index:



Date Signed: 10/19/2011
Distribution: Public
Replaces Policy: N/A
Supersedes Policy Dated: 09/22/2011
Affected Units: Adult Institutions
Effective Date: 10/19/2011
Scheduled Revision Date: July 2012
Revision Number: 7
Office of Primary Responsibility: DOC Administration

II Policy:

The Department of Corrections (DOC) will carry out the execution of an inmate in accordance with SDCL Chapter § 23A-27A. The execution will be conducted in a professional, humane and dignified manner.

III Definitions:

Lethal Injection:

The intravenous injection (IV) of a substance or substances in a lethal quantity (See SDCL § 23A-27A-32).

Witnesses:

People authorized to attend an execution as referenced in SDCL §§ 23A-27A-34 and 23A-27A-34.2.

IV Procedures:

1. General Provisions:

- A. Inmate executions are carried out by means of lethal injection. (See SDCL § 23A-27A-32)
1. At no time will any medical professional(s) employed at a South Dakota Department of Corrections facility participate in the execution process.
 2. Lethal Injection is not the practice of medicine in South Dakota (See SDCL § 23A-27A-32).
 3. The inmate who is to be executed will be connected to two (2) IV lines, normally one (1) in each arm. One (1) IV line will be the primary line for the lethal injection and the other IV line is designated as a backup.
 4. The lethal injection process involves the administration of drugs s, each in a lethal quantity, pursuant to a 3-Drug, 2-Drug, or 1-Drug protocol, depending on the date of the inmate's conviction and the availability of the necessary drugs:
 - a. 3-Drug Protocol

- i. The first drug, Sodium Pentothal (aka Sodium Thiopental) or Pentobarbital, is administered in a quantity sufficient to ensure the inmate is not subjected to the unnecessary and wanton infliction of pain.
 - ii. The second drug, Pancuronium Bromide, stops the inmate's breathing.
 - iii. The third drug, Potassium Chloride, stops the inmate's heart.
 - b. 2-Drug Protocol
 - i. The first drug, Sodium Pentothal (aka Sodium Thiopental) or Pentobarbital, is administered in a quantity sufficient to ensure the inmate is not subjected to the unnecessary and wanton infliction of pain.
 - ii. The second drug, Pancuronium Bromide, stops the inmate's breathing.
 - c. 1-Drug Protocol - Sodium Pentothal (aka Sodium Thiopental) or Pentobarbital is administered in a lethal quantity sufficient to ensure the inmate is executed without the unnecessary and wanton infliction of pain.
5. Any person convicted of a capital offense or sentenced to death prior to July 1, 2007 may choose to be executed in the manner provided in this policy or in the manner provided by South Dakota law at the time of the person's conviction or sentence (SDCL § 23A-27A-32.1).
 - a. The inmate will indicate their choice in writing to the Warden not less than seven (7) days prior to the scheduled week of execution.
 - b. If the inmate fails or refuses to choose in the time provided, then the inmate will be executed as provided by state law at the time of the execution (See SDCL § 23A-27A-32.1).
- B. The execution is conducted under the direction of the SDSP Warden.
 1. The Warden will select qualified staff to participate in the execution.
 2. The Warden will identify one (1) or more individuals trained to administer intravenous injections to carry out the lethal injection.
 - a. The Warden will present information regarding the individual(s) qualifications to the Secretary of Corrections for final approval (See SDCL § 23A-27A-32).
 - b. The individual(s) qualifications must demonstrate adequate training to competently carry out each technical step of the lethal injection (See Baze v. Rees, 553 U.S. 35 (2008) and Taylor v. Crawford, 487 F. 3d 1072 (8th Cir. 2007).
 - c. The name, address, or other identifying information relating to the identity of any person or entity supplying drugs for use in intravenous injections under SDCL § 23A-27A is confidential and disclosure of such information may not be authorized except pursuant to the terms of a court order.
 - d. The name, address, qualifications and other identifying information relating to the identity of any person administering the intravenous injections under SDCL § 23A-27A is confidential and disclosure of such information may not be authorized or ordered. Disclosure of this information is a Class 2 Misdemeanor (See, SDCL § 23A-27A-31.2).

- C. Male inmates sentenced to death will be housed in the SDSP or the Jameson Prison Annex. Female inmates sentenced to death will be housed at the South Dakota Women's Prison (See DOC policy 1.3.D.2 - *Capital Punishment Housing*).
1. Inmates sentenced to death are segregated from other inmates and single celled (See SDCL § 23A-27A-31.1).
 2. Physical access to an inmate sentenced to death is limited to family, attorney(s), clergy, DOC staff, other state or contractual staff stationed at the respective prison, people authorized by the respective Warden or any other person authorized to access the inmate through a court order (See SDCL § 23A-27A-31.1).
- D. The Governor may investigate the circumstances of the case of the inmate sentenced to death in a manner he deems appropriate and may require the assistance of the Attorney General (See SDCL § 23A-27A-19). The Governor has the power to reprieve or suspend the execution for up to ninety (90) days to complete his investigation (See SDCL § 23A-27A-20).
- E. If there is a question on an inmate's mental competence to proceed with the execution, the Warden will notify the Governor, Secretary of Corrections and the sentencing court. If the sentencing court determines that there is a substantial threshold showing of incompetence to be executed, the sentencing court will conduct hearings and order mental examinations. (See SDCL § 23A-27A-22, through § 23A-27A-26). As long as an inmate is considered incompetent, that inmate may not be executed (See SDCL §§ 23A-27A-24 and 23A-27A-26).
- F. The death penalty cannot be imposed on a person who was mentally retarded at the time of the commission of the offense and whose condition was manifested and documented before the age of eighteen (18) (See SDCL §§ 23A-27A-26.1 through 23A-27A-26.7).
- G. A pregnant women may not be executed (See SDCL §§ 23A-27A-27 through 23A-27A-29).
- H. The death penalty cannot be imposed on a person who committed an act punishable by death while under eighteen (18) years of age (See SDCL § 23A-27A-42).
- I. Inmate appeals regarding the death penalty are outside the responsibility of the DOC. Inquiries on the status of any inmate appeal(s) should be directed to the Office of the Attorney General or the defense attorney(s).

2. Warrant of Execution:

- A. The sentencing judge (or successor in office) will have a signed and certified Warrant of Death Sentence and Execution provided to the Warden of the state penitentiary (See SDCL §§ 23A-27A-15 and 23A-27A-16).
- B. The Warrant of Death Sentence and Execution will set the week within which the inmate is to be executed (See SDCL § 23A-27A-15).
- C. The Warden of the state penitentiary may carry out the execution at any time within the week stated in the Warrant of Death Sentence and Execution. (See, SDCL §§ 23A-27A-15 and 23A-27A-16).

3. Time and Place of Execution:

- A. All executions will take place at the SDSP (See SDCL § 23A-27A-32).

- B. The day and hour set by the Warden of the state penitentiary for the execution will be kept secret and only divulged to those invited or requested to be present at the execution (See SDCL § 23A-27A-37).
- C. No person will divulge the day and hour set for the execution prior to the Warden's public announcement (See SDCL § 23A-27A-37).
- D. The Warden of the state penitentiary will publicly announce the day and hour of the execution not less than forty-eight (48) hours in advance (See SDCL § 23A-27A-17).

4. Selection of Witnesses:

- A. No person under the age of eighteen (18) will be allowed to witness an execution (See SDCL § 23A-27A-36).
- B. Only persons authorized by the Warden of the state penitentiary, and witnesses authorized by SDCL §§ 23A-27A-32, 23A-27A-34, 23A-27A-34.1, 23A-27A-34.2 and 23A-27A-36 are allowed to attend the execution.
 - 1. The following witnesses are required to be invited to witness the execution by state law (See SDCL § 23A-27A-34):
 - a. The Attorney General of South Dakota.
 - b. The trial judge before whom the conviction occurred or his/her successor in office.
 - c. The State's Attorney of the county where the crime was committed.
 - d. The Sheriff of the county where the crime was committed.
 - C. The Warden of the state penitentiary will select a number of reputable adult citizens to witness the execution and two (2) members of the media (See section on Media Relations).
 - 1. Space and seating for witnesses is limited by the size of the rooms, the viewing windows and concerns for the safety and security of the witnesses.
 - 2. Preference will be given to accommodating as many representatives of the victim as possible given the space constraints and the requirements in state law that other persons also serve as witnesses.
 - D. There are no specific statutory requirements for how the Warden of the state penitentiary selects which representatives of the victim(s) may witness the execution.
 - 1. The victim's family or families may suggest the names of individuals who should attend.
 - 2. In the event the victim's family or families cannot or will not prioritize their list of individuals, the Warden of the state penitentiary will make the choice in the following manner:
 - a. Close relatives of victim(s) are given preference to witness the execution. A "close relative" is determined in the following order of preference:
 - 1). Spouse.
 - 2). Parent(s) or stepparent(s).
 - 3). Adult children, including stepchildren.
 - 4). Brother(s) or sister(s).
 - 5). Other family members (grandparents, aunts, uncles, nieces, nephews, cousins, etc.).
 - b. Friends of the victim (if there are less than five close relatives of a victim attending).

- E. The Warden of the state penitentiary has final approval of all witnesses not specifically required by law to be invited.
- F. All witnesses other than the Attorney General, trial judge, States Attorney and Sheriff are subject to the same background check as a regular visitor, unless exempted by the Warden of the state penitentiary.
- G. The inmate is allowed to request the attendance of up to five (5) persons to serve as witnesses. These persons may include but are not limited to legal counsel, members of the clergy, relatives or friends (See SDCL § 23A-27A-34.2). All the requested witnesses shall be on the inmate's visit list and at least eighteen (18) years of age (See DOC policy 1.5.D.1 *Inmate Visiting*).

5. Witness Behavior:

- A. Because the execution will take place inside a facility where many other inmates and staff will be present or in close proximity, all witnesses are expected to follow the rules and procedures of SDSP and the orders of escorting staff for the safety and security of all involved.
 - 1. Failure to comply with the rules and procedures of SDSP or the orders of escorting staff may result in denial of entry or removal of the witness from the facility.
 - 2. Witnesses are expected to follow the dress code for visitation. The witnesses will be provided this specific information in advance of the execution (See DOC policy 1.5.D.1 *Inmate Visiting*).
 - 3. Witnesses are subject to search by both a stationary and hand-held metal detector, and pat searches at any time (See DOC policy 1.3.A.5 *Searches - Adult Institutions*).
 - a. Witnesses may be searched more than one (1) time prior to the execution.
 - b. To the extent possible, pat searches will be conducted by a staff member of the same sex as the witness.
 - 4. Most personal property items are not allowed inside the SDSP.
 - a. For example, purses, cameras, pictures, pocketknives, pagers, watches, cell phones, signs, recording devices, other electronic equipment, etc. are not permitted. These items should be left in the vehicle or lockers that are available for storage of personal property in the SDSP lobby (See DOC policy 1.3.A.10 - *Restrictions on Electronic Equipment*).
 - b. No drugs, alcohol, tobacco products or firearms are allowed inside SDSP. Anyone suspected of being under the influence of drugs or alcohol will be denied entry or removed from the facility.
- B. All witnesses are cautioned to refrain from verbal outbursts or inappropriate action while inside the SDSP.
- C. No cameras or recording devices of any type are allowed inside the SDSP, the witness area or the area surrounding the execution chamber.

6. Media Relations:

- A. Requests for execution information (other than appeal issues) or interviews from media representatives are to be made either to the DOC Communications and Information Manager or to the respective Warden (See DOC policy 1.1.A.4 *Relationship with News Media, Public and Other Agencies*).

1. The Warden (or designee) can discuss procedures under the control of SDSP that affect an execution. Examples of procedures which may be discussed:
 - a. The timelines of the execution, from issuance of the warrant of execution to the certificate of execution, return of the deceased inmate's body and the burial.
 - b. The various steps that go along with the execution; i.e. sequence of events, last meal, last words, etc.
 - c. Witness information (See sections on Selection of Witnesses and Witness Behavior).
 - d. A description of the regular visit procedures inside the security perimeter.
2. Questions on the process of the Governor to investigate the circumstances of the case will be directed to the Governor's Office or to the Attorney General's Office.
- B. The decision to grant tours of the execution chamber is at the total discretion of the Warden of the state penitentiary.
- C. The decision to grant photo/video of the execution chamber is subject to the approval of the Secretary of DOC.
- D. The two (2) media witnesses who will attend the execution will be selected as follows:
 1. The first media representative will be selected from the Associated Press.
 2. The second media representative will be selected from a media outlet located in the proximity of where the crime took place.
- E. No cameras or recording devices of any type are allowed in the witness area or the surrounding area of the execution chamber.
 1. Each media witness attending the execution may have writing material in the waiting area but must leave those materials behind when moved to the witness area.
 2. Each media witness attending the execution will be given paper and a pencil once he/she arrives in the witness area.

7. Final Visit Arrangements:

- A. Reasonable accommodations for visits by immediate family will be made after the inmate has been moved to a holding cell near the execution chamber.
 1. Visits are allowed between 8:00 AM and 8:00 PM, except for the day of the execution (See Item "E" in this section).
 2. All personal visits will be Class II (non-contact) (See DOC policy 1.5.D.1 *Inmate Visiting*).
 3. Telephone calls may be substituted for personal visits.
- B. Visits will be supervised by DOC staff and must be arranged in advance through the Warden or Deputy Warden.
 1. Visitors are subject to search by both a stationary and hand-held metal detector, and pat searches at any time (See DOC policy 1.3.A.5 *Searches - Adult Institutions*).
 2. Visitors must abide by the rules and regulations of the SDSP and the DOC.

3. Failure to abide by the rules and regulations of the SDSP and the DOC may result in termination of a current visit and denial of future visits.
- C. Visitors will be escorted and supervised at all times.
- D. The following members of the inmate's immediate family are allowed Class II visits with the inmate: father, mother, stepfather, stepmother, brother(s), sister(s), stepbrother(s), stepsister(s), biological children and spouse.
- E. Visits with immediate family will cease at least six (6) hours prior to the scheduled time of execution.
- F. Attorney access will be accommodated as much as possible.
 1. Attorneys are subject to all the visit arrangements/restrictions listed in this section.
 2. Any documents that need to be shared with the inmate will be passed to SDSP staff, inspected for contraband and if approved, the documents will be given to the inmate.
 3. Attorney(s) must leave the holding cell area at least one (1) hour before the scheduled execution time.
- G. Clergy will be allowed additional visits with the inmate until one (1) hour before the scheduled execution time.

8. The Execution:

- A. An execution involves strict security procedures that are intended to protect the witnesses, staff, other inmates and the public at large. These security procedures are confidential and will not be discussed.
- B. The Governor, Attorney General and Chief Justice of the State Supreme Court or their designees will be provided with the telephone numbers of the Warden's Office, the chemical room and multiple backup telephone numbers including personal cell phone numbers of the Warden and Deputy Warden for the purpose of emergency or last minute notification. The Warden and Deputy Warden will also be equipped with SDSP-Issue radios.
- C. After confirming with the Governor's Office, the Attorney General and the Chief Justice of the State Supreme Court that no last minute appeals have been initiated and that no stays have been ordered, the inmate will be moved to the execution chamber and secured to the table.
- D. Two (2) intravenous injection (IV) sites will be prepared and inserted, normally one (1) in each of the inmate's arms.
- E. A bag of sterile saline solution will be connected to each IV site. Each IV will be checked and verified as running properly before witnesses are escorted into the viewing rooms.
- F. The witnesses will be brought into the respective witness rooms one (1) group at a time.
- G. The curtains outside the witness rooms will remain closed until the Warden is satisfied, everything is ready and orders them opened.
- H. The Warden will give the inmate an opportunity to make a final statement. A transcript will be made of the inmate's statement and the transcript will be made public.
- I. For 3-Drug or 2-Drug protocol executions, the Sodium Pentothal or Pentobarbital will be administered and allowed to take effect prior to administering the subsequent drugs.

- J. After the lethal injections have been administered, the Warden will wait a brief period before summoning a person capable of examining the inmate for the presence of respirations and heartbeat and if appropriate to pronounce death, including the time of death.
1. If the county coroner is on the premises, the Warden will ask the county coroner to certify death, including the time of death and then take charge of the body.
 2. If the county coroner is not on the premises, the Warden will direct the inmate's body to be taken to a nearby morgue, where the county coroner will be summoned to examine it and certify death.
- K. After death has been pronounced, the curtains of the witness rooms will be closed and the witness groups will be escorted away from the area separately.

9. Post-Execution Procedures:

- A. The certificate of execution and return will be prepared and signed by the Warden and the certificate of execution will also be signed by all witnesses present and witnessing the execution (See SDCL §§ 23A-27A-34, 23A-27A-34.2 and 23A-27A-40.1).
- B. The Warden will ensure the county coroner is permitted to investigate the death pursuant to SDCL §§ 23-14-18(3) and 24-1-27
1. If the county coroner is on the premises, the body of the executed inmate will not be removed from the execution chamber until after the county coroner has certified the death of the inmate.
- C. After the county coroner has completed the investigation, the body of the executed inmate (unless claimed by some relative), will be interred in a cemetery within Minnehaha County (Also see SDCL § 23A-27A-39 and DOC policy 1.4.E.6 - *Management of Offender Deaths*).
- D. After the execution has been completed, the DOC Communication and Information Manager will announce the fact in a press briefing that will be conducted elsewhere on the SDSP grounds.
- E. Media representatives present at the execution are required to attend the post-execution press conference to share information about the execution with other media.
- F. Within ten (10) days following the execution, the certificate of execution and return will be filed with the Clerk of Courts of the county where the offense occurred. (See SDCL § 23A-27A-40.1)

V Related Directives:

SDCL chapter 23-14, chapter 23A-27A and 24-1-27
Baze v. Rees, 553 U.S. 35 (2008)
Taylor v. Crawford, 487 F. 3d 1072 (8th Cir. 2007)
DOC policy 1.1.A.4 *Relationship with News Media, Public and Other Agencies*
DOC policy 1.3.A.5 -- *Searches - Adult Institutions*
DOC policy 1.3.A.10 -- *Restrictions on Electronic Equipment*
DOC policy 1.3.D.2 -- *Capital Punishment Housing*
DOC policy 1.5.D.1 -- *Inmate Visiting*
DOC policy 1.4.E.6 -- *Management of Offender Deaths*

VI Revision Log:

August 2006: New policy.

June 2007: Revised the policy statement. Revised the definition of lethal injection. Removed medical doctors as witnesses required to be invited to the execution. Deleted references and

procedures related to SDCL § 23A-27A-38. **Revised** the post-execution procedures. Moved some information from the section on Media Relations and placed it in a new section titled The Execution. **Added** a reference to DOC policy 1.3.A.10. **Added** language about death penalty appeals. **Added** a statement regarding security measures. **Added** the circumstances in which an inmate may choose the current lethal injection procedures or revert back to existing law at the time of conviction or sentence. **Clarified** which individuals the victim's family may request as witnesses. **Added** a statement on the trained individuals' experience and qualifications. **Added** more specific procedures on administering the lethal dosages. **Added** a reference to *Taylor v. Crawford*.

August 2007: **Changed** "medical procedure" to "technical procedure" to avoid any possibility of confusion regarding an execution being considered the practice of medicine. **Updated** the procedures involving the county coroner in the section on The Execution.

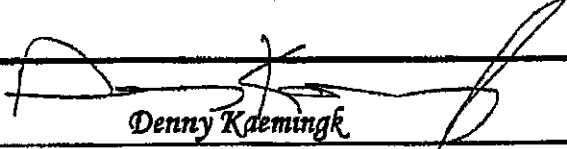
June 2008: **Revised** formatting of policy in accordance with 1.1.A.2. **Changed** policy because of recent law changes to the capital punishment chapter, SDCL 23A-27A by the SD Legislature, 2008, SB 53 and the United States Supreme Court in *Baze v. Rees*, 553US 35, (2008). **Revised** definition of Lethal Injection. **Changed** "through" to "and" and "36" to "34-2" in definition of Witnesses. **Deleted** reference to DOH policy in subsection (ss) (A1), **revised** wording in ss (A2), **added** "each in a lethal quantity" in ss (A4), **deleted** comment about remaining unconscious in ss (A4a), **replaced** "person" with "inmate" in ss (5A and B), **added** comment about state statute and statute 32-1 in ss (5B), **replaced** "at least two (2)" to "one (1) or more" in ss (B2), **revised** section reading properly trained to read adequately trained and referenced court cases in ss (B2b), **clarified** on the information that is to remain confidential for those assisting with administering the intravenous injection in ss (b2c), **revised** wording of how inmates are housed and **replaced** statute 16 with 31.1 in ss (C1), **replaced** statute 16 with 31.1 in ss (C2), **added** that the Secretary of DOC and sentencing court will be notified regarding any question regarding an inmate's mental competence and **replaced** statement regarding a commission may be appointed with language from statute 22 through 26, and **replaced** statutes in ss (E) and **deleted** "exaction" and "and/" in ss (I), of General Provisions section. **Revised** statement regarding sentencing judge in ss (A), **replaced** "delivered" with "provided in ss (A), **added** "Death Sentence and" to "Execution" regarding the certified Warrant in ss (A, B and C) and **added** statute 16 in ss (A and C) of Warrant of Execution section. **Replaced** "the witnesses" with "those" in ss (B), **revised** ss (C) to state no person will divulge within Time and Place of Execution section. **Added** statute 36 in ss (A), **replaced** "DOC staff, law enforcement officers" with "persons", **added** statute 32, 24-2, 36 and **replaced** 35 with 34.1 in ss (B), **deleted** former ss (B2), **replaced** "no more than ten (10)" with "a number of" in ss (C), **deleted** ss (C1), **moved** ss (C2) to above ss (C), **added** new ss (C1 and C2), **revised** wording regarding selection of witnesses in ss (D, D1, D2 and D2a), **deleted** former ss (D2c) regarding multiple victims, **deleted** "(Attorney General, trial judge, states attorney and sheriff)" in ss (E) and **added** ss (G) in Selection of Witnesses section. **Clarified** that no cameras or recording devices are allowed inside SDSP or area surrounding the execution chamber in ss (C) of Witness Behavior section. **Revised** wording in ss (A), **deleted** statement regarding photo requests of the execution chamber in ss (B) and **added** a new ss (C) regarding requests to take photos of the execution chamber, of the Media Relations section. **Deleted** statement regarding pursuant to SDCL 23A-27A-35 in ss (G) of Final Visit Arrangements section. **Revised** ss (D) to include two intravenous injection (IV) sites will be prepared and inserted, **added** "site" when referencing IV in ss (E), **added** "the transcript" in ss (H), **deleted** "to render the inmate unconscious" in ss (I), **replaced** "EMT" with "a person capable of examining" and **added** "for the presence of respirations and heartbeat and if appropriate" to ss (J), **deleted** statement about county coroner examining the inmate and **added** statement about taking charge of the body in ss (J2) and **deleted** statement regarding EMT and county coroner and **added** statement about death being pronounced ss (K) of The Execution section. **Replaced** "persons" with "witnesses", **deleted** statute 40, **added** statutes 34, 34.2, 40.1 in ss (A), **added** statute 24-1-27 in ss (B), **replaced** "declared" with "certified" in ss (B1) **added** statute 40.1 in ss (F) and **revised** bullets to read accordingly within the Post-Execution Procedures section. **Added** *Baze v. Rees*, 553 US 35, (2008), *Taylor v. Crawford*, 487 F. 3d 1072 (8th Cir., 2007) and DOC policy when referencing policies throughout policy. **Revised** other grammatical, spacing and sentence structure throughout policy.

July 2009: Added site code to Baze v Rees throughout policy. Added hyperlinks throughout policy. Deleted SDCL 23A-27A-30 in ss (G of General Provisions).

July 2010: Revised formatting of Section 1. Replaced SDSP with SD DOC in ss (A1 of General Provisions).

September 2011: Reviewed with no changes.

October 2011: Deleted "a" in IV.1.A. Added 3-Drug, 2-Drug, and 1-Drug protocol descriptions in Part IV.1.A.4. Added IV.1.B.1.c. Moved former IV.1.B.2.c. to IV.1.B.2.d. Updated Baze cites to published U.S. citation throughout. Deleted "Pancuronium Bromide and Potassium Chloride" from IV.8.I and added "For 3-Drug or 2-Drug protocol executions" and "subsequent drugs." Deleted "dosages of Sodium Pentathol, Pancuronium Bromide and Potassium Chloride" from IV.8.J. and added "injections."

 Denny Kaemingk Denny Kaemingk, Secretary of Corrections	10/19/2011 Date
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STATE OF SOUTH DAKOTA)

IN CIRCUIT COURT

:SS

COUNTY OF PENNINGTON)

SEVENTH JUDICIAL CIRCUIT

CHARLES RUSSELL RHINES,

Petitioner,

v.

DOUGLAS WEBER, Warden,

South Dakota State

Penitentiary,

Respondent

Civ. 02-924

FIRST AMENDED

PETITION FOR WRIT

OR HABEAS CORPUS AND

COMPLAINT FOR

DECLARATORY AND

INJUNCTIVE RELIEF

Charles R. Rhines, for his First Amended Petition for Writ of Habeas Corpus and Complaint for Declaratory and Injunctive Relief states and alleges as follows:

1. Petitioner is currently in prison in the South Dakota Department of Corrections at Sioux Falls, SD. Petitioner is under a Judgment of Conviction entered in Circuit Court, Seventh Judicial Circuit, Pennington County, South Dakota. The Judgment of Conviction and Sentence of Death was entered on January 29, 1993. A copy of the Judgment was attached to Rhines' First Application for Writ of Habeas Corpus.

2. Charles R. Rhines appealed to the South Dakota Supreme Court, which affirmed his Conviction and Sentence of Death.

3. Charles R. Rhines filed a Petition for Writ of Certiorari, but the United States Supreme Court denied further review on December 2, 1996.

4. Charles R. Rhines applied for Writ of Habeas Corpus in State Court on December 5,

EXHIBIT

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1996.

5. Charles R. Rhines' Habeas Petition was denied by the Trial Court on October 8, 1998.

6. A Certificate of Probable Cause was granted, and the matter was appealed to the South Dakota Supreme Court.

7. The South Dakota Supreme Court affirmed the denial of the Petition for Writ of Habeas Corpus on February 9, 2000.

8. On February 22, 2000, Charles R. Rhines filed a Petition for Writ of Habeas Corpus in Federal District Court, District of South Dakota pursuant to 28 U.S.C. § 2254.

9. An Amended Petition for Writ of Habeas Corpus was filed on behalf of Charles R. Rhines on November 20, 2000.

10. The Respondent, Douglas Weber, alleged that several of the grounds raised by Charles R. Rhines in his Amended Petition for Writ of Habeas Corpus had not been exhausted and were, therefore, procedurally defaulted.

11. On July 3, 2002, the United States District Court, District of South Dakota, Western Division, found that Charles R. Rhines' grounds for relief numbers two (B), six (E), nine (B), (H), (I), and (J), twelve and thirteen were unexhausted.

12. The United States District Court for the District of South Dakota, Western Division, stayed the Petition pending exhaustion of Charles R. Rhines' State Court remedies on the condition that Rhines file a Petition for Habeas review in State Court within sixty (60) days and return to Federal Court within sixty (60) days of completing the State proceedings.

13. Respondent, Douglas Weber, appealed to the Eighth Circuit.

14. On direct appeal, the Eighth Circuit Court of Appeals vacated the stay and remanded the case to the United States District Court, District of South Dakota, Western Division, so that the District Court could determine whether Charles R. Rhines could proceed by dismissing the unexhausted claims from his Petition.

15. Charles R. Rhines filed a Petition for Writ of Certiorari with the United States Supreme Court to determine whether a District Court may issue an Order of Stay and Abeyance in a mixed petition for a Habeas Corpus Petition.

16. The United States Supreme Court held that the stay and abeyance procedure in a mixed petition for Petition for Writ of Habeas Corpus is permissible under certain circumstances. The case was remanded to the Eighth Court of Appeals so that it could determine whether the District Court abused its discretion in granting the stay and abeyance.

17. Because the District Court did not have the benefit of the controlling Supreme Court authority when it issued the Order of Stay and Abeyance in 2002, the Eighth Circuit Court of Appeals remanded the case to the District Court to analyze the Petition for Writ of Habeas Corpus under the tests enunciated in the United States Supreme Court case of Rhines v. Weber, 125 S. Ct. 1528, 161 LED 2nd 440, (2002).

18. Charles R. Rhines filed his initial Application for Writ of Habeas Corpus in the Circuit Court of South Dakota, Seventh Judicial Circuit, County of Pennington, on August 22, 2002.

19. On December 19, 2005, the United States District Court, the District of South Dakota, Western Division, entered its Order that the Petition for Habeas Corpus filed with the District Court was stayed pending exhaustion of various issues in State Court, conditioned upon the petition of returning to the District Court within thirty days of completing said exhaustion.

20. The officer by whom Charles R. Rhines is so imprisoned and so restrained is Douglas Weber, Warden of the South Dakota State Penitentiary.

GROUND ONE

21. The rights of Charles R. Rhines to due process, an impartial jury, and equal protection of the law were violated by exclusion for cause of the prospective juror Jack Meyer.

GROUND TWO

22. Charles R. Rhines' rights to due process, equal protection and to be free from cruel and unusual punishment were violated on account of the unconstitutionality of the South Dakota Capital Punishment Statutes in that the South Dakota Death Penalty Statutes in SDCL 23A-27A-1, mandate that the court "shall consider, or shall include in instructions to the jury" death penalty provisions "in all cases in for which the death penalty may be authorized," which is all Class A felonies under SDCL 22-6-1.

GROUND THREE

23. Charles R. Rhines' Fifth Amendment rights under the United States Constitution, and his corresponding rights under the South Dakota Constitution, including, but not limited to Article XI, Sections 7, 9, and 10, to due process of law, and the Sixth Amendment rights under the United States Constitution, and his corresponding rights under the South Dakota Constitution, including, but not limited to Article VI, Section 6 and 7, to assistance of counsel were violated through the ineffective assistance of his trial counsel. The ineffective assistance of trial counsel prejudiced Charles R. Rhines, and manifested itself in multiple ways including:

a. The tepid presentation of evidence during the penalty phrase by the attorneys for Mr. Rhines, including failure to contact or call available witnesses – including, but

not limited to John Fouske, James Mighell and Connie Royer – who would have provided helpful testimony for Mr. Rhines in the penalty phase;

b. The failure to catch and correct onerous and false, highly prejudicial, testimony of Glen Wishard.

c. The failure to request the hiring of, consult with, or hire a mitigation consultant or expert. – *missed only find a mitigating factor mitigation expert would not be able to mitigate element of killing a witness or victim for sentencing again*

d. The failure of trial counsel to register objections to keep out irrelevant prejudicial testimony such as Rhines having access to a gun, a statement by Rhines at the victim's funeral.

GROUND FOUR

not relevant to cause
24. The due process and equal protection rights of Charles R. Rhines under both the United States Constitution and the South Dakota Constitution were violated by various acts of prosecutorial misconduct. The prosecutor committed prosecutorial misconduct in, among other things, ^①maintaining that the victim's hands were tied prior to the fatal wound, when the evidence was to the effect that they were tied afterwards; ^②in referring to the victim being "gutted" in the assault when there was no such evidence; ^③using and arguing from false and erroneous testimony from witness Glen Wishard; ^④and using the improper tactic of eliminating all jurors with any misgivings about imposition or the death penalty.

GROUND FIVE

not relevant to cause
25. Charles R. Rhines was deprived his rights to due process of law, equal protection of the laws and the doctrine of separation of powers as provided by the state and federal constitutions in that the judgment and sentence of death resulted from a failure to follow the

GROUND SIX

26. The South Dakota Supreme Court conducted its statutorily mandated proportionality review based only upon those cases in which a death penalty was imposed instead of all cases in which a death penalty might be imposed in violation of the terms of SDCL Ch 23A-27A, and deprived Charles R. Rhines of his rights to due process of law as provided by the state and federal constitutions.

GROUND SEVEN

27. The process by which Charles R. Rhines was charged, convicted and sentenced to death deprived him of his right to due process under the federal and state constitutions in that:

- a. The death penalty under Chapter 23A-27A is a sentencing enhancement in all cases for which the death penalty may be authorized.
- b. The due process clause of the Fifth Amendment and the notice and jury guarantee of the Sixth Amendment of the United States Constitution and the corresponding sections of the South Dakota Constitution require that any fact that increases the maximum penalty for a crime must be charged in an indictment, or, in the case of state actions, in an indictment or information.
- c. The federal constitutional rights apply to Charles R. Rhines under the Fourteenth Amendment.
- d. The aggravating circumstances under which Charles R. Rhines sentence of death was based were not alleged in the indictment or in any information.

GROUND EIGHT

28. The manner of execution as provided by SDCL 23A-27A-32 as in effect at the time of Charles R. Rhines conviction violates his rights to due process law and constitutes cruel and

unusual punishment under the Eighth Amendment of the United States Constitution and the corresponding Article under the South Dakota Constitution:

a. Executions are constitutional if they involve unnecessary and wanton infliction of pain or torture or lingering death.

b. Where pain is inflicted in an execution results from something more than the mere extinguishment of life, the United States Constitution Eighth Amendment and the corresponding South Dakota articles prohibition against cruel and unusual punishment are implicated.

c. Given the two chemicals specified in SDCL 23A-27A-32 in effect at the time of Charles R. Rhines' conviction and the absence of a person trained to administer and monitor anesthesia, it is reasonably foreseeable that Charles R. Rhines may experience suffocation and excruciating pain during his execution in violation of the Eighth Amendment and the corresponding South Dakota Amendment.

d. An execution pursuant to SDCL 23A-27A-23 as codified on the date of Charles R. Rhines' conviction violates the United States Constitution and the South Dakota Constitution prohibition against cruel and unusual punishment and is therefore unconstitutional.

GROUND NINE

29. That Charles R. Rhines' rights to due process of law and his rights to assistance of counsel under the United States Constitution and the South Dakota Constitution were further violated through the ineffective assistance of his trial counsel in that they failed to allege and argue as part of the direct appeal to the South Dakota Supreme Court the issues raised in grounds 1 through 8, inclusive, of this Petition, thereby prejudicing the Petitioner.

GROUND TEN

30. Charles R. Rhines' right to due process of law and his right to assistance of counsel guaranteed under the United States Constitution and the South Dakota Constitution were violated through the ineffective assistance of his habeas corpus counsel, in that counsel failed to raise the issues set forth in grounds 1 through 9, inclusive, of this Petition, in the Petition for Writ of Habeas Corpus initially filed, and the subsequent appeal to the South Dakota Supreme Court.

GROUND ELEVEN

31. The execution of Charles R. Rhines by lethal injection, as set forth in the present SDCL 23A-27A-32 violates Rhines' rights to due process under law and his rights against cruel and unusual punishment guaranteed under the United States Constitution and the South Dakota Constitution.

- a. SDCL 23A-27A-32 was amended by the South Dakota Legislature during the 2007 legislature session.
- b. On information and belief, the South Dakota Legislature rejected proposed amendments requiring executions be carried out in the most humane manner possible.
- c. SDCL 23A-27A-32 removes the requirement of a physician participation in the execution process.
- d. Executions are unconstitutional if they involve unnecessary and wanton infliction of pain or torture or lingering death.
- e. Where pain is inflicted in an execution results from something more than the mere extinguishment of life, the constitutions of the United States and South Dakota. South Dakota Articles prohibition against cruel and unusual punishment are implicated.

32. Upon information and belief, the protocol presently in effect for lethal injection execution uses a three drug cocktail.

33. With the three drug cocktail presently believed to be used in executions, in the absence of a person trained to administer and monitor an anesthesia, it is reasonably foreseeable that Charles R. Rhines may experience suffocation and excruciating pain during his execution in violation of the Constitutions of the United States and South Dakota.

34. An execution pursuant to the present SDCL 23A-27A-32 violates the United States Constitution and the South Dakota Constitution's prohibition against cruel and unusual punishment and it is therefore unconstitutional.

GROUND TWELVE

35. Charles R. Rhines' right to due process of law against cruel and unusual punishment is guaranteed under the United States Constitution and the South Dakota Constitution is violated by the statutory procedure set forth in 23A-27A-32.

a. SDCL 23A-27A-32 was passed by the South Dakota legislature during the 2007 South Dakota legislative session.

b. SDCL 23a-27A-32 was amended in two specific areas: it removed the specifications of the two-drug cocktail to be used in the lethal injunction by the prior statute, and substituted in its place the requirement that the warden should determine the substances and the quantity of substances used for the punishment of death. The statute provided no other detail recording the warden's decision. The second change was that a physician was no longer required to participate in the execution process.

36. Executions are unconstitutional if they involve unnecessary and want an infliction of pain or torture or lingering death.

a. Pain inflicted in an execution results from something more than the mere extinguishment of life, the United States Constitution and the South Dakota Constitution is prohibition against cruel and unusual punishment is implicated.

b. An information and belief, the South Dakota legislature rejected proposed amendments requiring executions to be carried out in the most humane manner possible.

37. Given the fact that the warden is given no guidance as to the type of substances used or the quality of substances used for the punishment of death, and there is no requirement by law that the execution be carried out in a humane manner, and the absence of a person trained to administer and monitor an anesthesia, it is reasonably foreseeable that Charles R. Rhines may experience suffocation and excruciating pain during his execution, as allowed under the present statute.

38. An execution pursuant to the present SDCL 23A-27A-32 violates the United States Constitution and the South Dakota Constitution prohibition against cruel and unusual punishment and therefore is unconstitutional.

GROUND THIRTEEN

39. The present SDCL 23A-27A-32 constitutes an unconstitutional bill of attainder, and an unconstitutional ex post facto law as applied to Charles R. Rhines.

a. SDCL 23A-27A-32, as codified on the date of Charles R. Rhines' convictions is unconstitutional, for reasons previously stated.

b. SDCL 23A-27A-14 requires a condemned inmate to be sentenced to life in prison if the death penalty is declared unconstitutional.

c. Because Charles R. Rhines must be sentenced to life in prison as a result to the unconstitutionality of SDCL 23A-27A-32 as codified at the time of his conviction, and as a result of the application of SDCL 23A-27A-14, SDCL 23A-27A-32, as presently codified, constitutes an unconstitutional bill of attainder and an unconstitutional ex post fact law, as applied to Charles R. Rhines.

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

1. Charles R. Rhines is presently incarcerated at the South Dakota Penitentiary. Defendant Douglas Weber is a resident of Sioux Falls, South Dakota and is employed by the State of South Dakota as a warden at the South Dakota State Penitentiary.
2. This is an action for declaratory and injunctive relief brought pursuant to the laws of the State of South Dakota.
3. This action is brought alternatively to Charles R. Rhines' Petition for Writ of Habeas Corpus.
4. The mandatory execution protocol provided by SDCL 23A-27A-32 as codified at the time of Charles R. Rhines' conviction required an intravenous injection by lethal quantity of an ultra short acting barbiturate in combination with a chemical paralytic agent and continuing the application thereof until convict was pronounced dead by a licensed physician according to the standards of medical practice.
5. SDCL 23A-27A-32 was amended by the South Dakota legislature during the 2007 South Dakota legislative session.
6. Given the two chemical specified in SDCL 23A-27A-32 in effect at the time Charles R. Rhines' conviction and the absence of a physician trained to administer and monitor an anesthesia, it is reasonable foreseeable that Charles R. Rhines may experience suffocation and

excruciating pain during his execution in violation of the constitutions of the United States and the State of South Dakota.

7. An execution pursuant to SDCL 23A-27A-32 as codified on the date of Charles R. Rhines' conviction violates the constitutions of the State of South Dakota and the United States prohibition against cruel and unusual punishment and is therefore unconstitutional.

8. SDCL 23A-27A-14 requires a condemned inmate be sentenced to life in prison if the death penalty is declared unconstitutional.

9. Because Charles R. Rhines must be sentenced to life in prison as a result of the application of SDCL 23A-27A-14, the present SDCL 23A-27A-32 constitutes an unconstitutional bill of attainder as applied to Charles R. Rhines.

10. Because Charles R. Rhines must be sentenced to life in prison as a result of the application of SDCL 23A-27A-14, the present SDCL 23A-27A-32 constitutes unconstitutional ex post facto laws as applied to Charles R. Rhines.

WHEREFORE, Petitioner Charles R. Rhines prays for the following relief:

1. That this court allow discovery and hold an evidentiary hearing on Petitioner's First Amended Petition for Writ of Habeas Corpus and Complaint for Declaratory Injunctive Relief;
2. An Order granting Petitioner relief on his First Amended Petition for Writ Habeas Corpus on any and all grounds 1 through 12 inclusive;
3. A declaration that a execution carried out by means of the two drug cocktail provided in SDCL 23A-27A-32 in effect at the time of Charles R. Rhines' conviction constitutes cruel and unusual punishment in violation of the constitutions of the State of South Dakota and the United States as well as depriving Rhines of his right to due process of law, and is therefore unconstitutional;

4. a declaration that because SDCL 23A-27A in effect at the time of Rhines' conviction is unconstitutional, that Charles R. Rhines must be sentenced to life in prison;

5. A declaration that SDCL 23A-27A-32, as presently codified, and as applied to Charles R. Rhines, constitutes an unconstitutional bill of attainder and an unconstitutional ex post facto law and deprives Rhines of his right to due process of the law;

6. An injunction requiring the State of South Dakota to sentence Charles R. Rhines to life in prison pursuant to SDCL 23A-27A-14; and

7. For such other and further relief as to the court seems just and appropriate.

Dated this 19th day of February, 2008.

Stuart, Gerry & Schlimgen, Prof. LLC:

By: 

John A. Schlimgen

307 W. 10th Street

PO Box 966

Sioux Falls, SD 57101-0966

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Pennington County, SD
FILED
IN CIRCUIT COURT

FEB 21 2008

Renee Truman, Clerk of Courts

By  Deputy

X2

DR. MARK DERSHWITZ-12/3/12

Page 1

1 STATE OF SOUTH DAKOTA) IN CIRCUIT COURT
2) SS
3 COUNTY OF PENNINGTON) SEVENTH JUDICIAL COURT
4 CHARLES RUSSELL RHINES,) CIV. NO. 02-924
5 Petitioner,)
6)
7 DOUGLAS WEBER, Warden,)
8 South Dakota State)
9 Penitentiary,)
10 Respondent.)
11
12

13 VIDEOTAPED DEPOSITION OF DR. MARK DERSHWITZ,
14 taken before Kristin M. Stedman, a Registered
15 Professional Reporter and Notary Public in and for
16 the Commonwealth of Massachusetts, at the Office of
17 the Federal Public Defender, 51 Sleeper Street, 5th
18 Floor, Boston, Massachusetts, on Monday, December 3,
19 2012, at 12:29 p.m.
20

21 KACZYNSKI REPORTING
22 72 CHANDLER STREET
23 BOSTON, MA 02116
24 (617) 426-6060

KACZYNSKI REPORTING

EXHIBIT

3

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DR. MARK DERSHWITZ-12/3/12

<p style="text-align: right;">Page 2</p> <p>1 APPEARANCES: 2 ON BEHALF OF THE PETITIONER: 3 NEIL FULTON, ESQ. 4 Office of the Federal Public Defender 5 Districts of South Dakota and North Dakota 6 101 South Pierre Street, 3rd Floor 7 P.O. Box 1258 8 Pierre, SD 57501 9 (605) 224-0089 10 ON BEHALF OF THE RESPONDENT: 11 PAUL S. SWEDLUND, ESQ. 12 State of South Dakota 13 Office of Attorney General 14 1302 E. Highway 14, Suite 1 15 Pierre, SD 57501-8501 16 (605) 773-3215 17 18 THE VIDEOGRAPHER: 19 STEVEN GARCIA 20 National Video Reporters, Inc. 21 7 Cedar Drive 22 Woburn, MA 01801 23 (781) 937-9900 24</p>	<p style="text-align: right;">Page 4</p> <p>1 PROCEEDINGS 2 ----- 3 THE VIDEOGRAPHER: We are now recording 4 and on the record. My name is Steven Garcia. I am 5 a legal video specialist for National Video 6 Reporters, Inc. Our business address is 7 Cedar 7 Drive, Woburn, Massachusetts, 01801. 8 Today is December 3, 2012, and the time 9 is 12:29 p.m. This is the deposition of Dr. Mark 10 Dershwitz in the matter of Charles Russell Rhines, 11 plaintiff, versus Douglas Weber, defendant, in the 12 Circuit Court, Seventh Judicial Court, State of 13 South Dakota, County of Pennington, Civil Action 14 Number 02-924. 15 This deposition is being taken at 51 16 Sleeper Street, Boston, Massachusetts on behalf of 17 the plaintiff. The court reporter is Kristin M. 18 Stedman of Kaczynski Court Reporting. 19 Counsel will state their appearances, 20 and the court reporter will administer the oath. 21 MR. SWEDLUND: Paul Swedlund on behalf 22 of the respondent. 23 MR. FULTON: Neil Fulton on behalf of 24 the petitioner.</p>
<p style="text-align: right;">Page 3</p> <p>1 INDEX 2 EXAMINATION BY MR. SWEDLUND.....Page 5,34 3 EXAMINATION BY MR. FULTON.....Page 22 4 5 6 7 8 9 10 EXHIBITS 11 No. Description Page No. 12 None marked. 13 14 15 16 17 18 19 20 21 22 23 24</p>	<p style="text-align: right;">Page 5</p> <p>1 ----- 2 DR. MARK DERSHWITZ, 3 having first been satisfactorily identified and 4 duly sworn by the Notary Public, 5 was examined and testified as follows: 6 ----- 7 EXAMINATION BY MR. SWEDLUND: 8 Q. Could you state your name, please, for the 9 record. 10 A. Mark Dershwitz. 11 Q. And, doctor, you are here today to provide 12 expert testimony in the case of Rhines v. Weber, do 13 you understand that? 14 A. Yes. 15 Q. And do you understand that all the answers 16 that you give must be given to a reasonable degree 17 of professional certainty for your profession? 18 A. Yes. 19 Q. Could you describe your qualifications for 20 the court, your background and training that allows 21 you to testify as an expert here in this case today? 22 A. Well, in college I have a bachelor's degree 23 in chemistry, I then went to medical school at 24 Northwestern University, and also obtained a Ph.D.</p>

2 (Pages 2 to 5)

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DR. MARK DERSHWITZ-12/3/12

<p style="text-align: right;">Page 6</p> <p>1 In pharmacology from Northwestern. I then did a 2 residency in anesthesiology at Massachusetts General 3 Hospital in Boston, followed by a research 4 fellowship, and I have worked in academic 5 anesthesiology since 1986, from 1986 through 2000 at 6 Massachusetts General Hospital in Boston and Harvard 7 Medical School, and since 2000, at the University of 8 Massachusetts Medical School in Worcester.</p> <p>9 Q. You mentioned the field of pharmacology, 10 can you describe for the court what is that field?</p> <p>11 A. Pharmacology is a basic medical science 12 that, broadly speaking, studies the effects of 13 chemicals on biological systems, and more 14 specifically, the effects of drugs on human beings.</p> <p>15 Q. And there are a couple of terms there, 16 pharmacodynamics and pharmacokinetics, can you also 17 describe those for the court?</p> <p>18 A. Pharmacodynamics is the study of the 19 mechanism of action of how drugs actually work, 20 whereas pharmacokinetics is the time course of 21 medications, how long does the drug actions last and 22 how long does the drug last in the body.</p> <p>23 Q. So dynamics would be the effect of the drug 24 on a person and the kinetics would be the duration</p>	<p style="text-align: right;">Page 8</p> <p>1 Q. And what was the nature of your testimony 2 in that case?</p> <p>3 A. The charges against him were that he tried 4 to blow up a plane, and when the passengers realized 5 what he was trying to do, they restrained him 6 physically, and then some physicians on the plane 7 opened up the medical kit on the plane and they gave 8 him some sedating medications, including diazepam, 9 which is more commonly known as Valium, and when the 10 plane was diverted here to Boston, shortly after his 11 arrest, he was interrogated and he confessed, and 12 the question was whether or not somebody is capable 13 of understanding their Miranda rights when they 14 confess after being given a medication like 15 diazepam, which produces what is called anterograde 16 amnesia, which means amnesia for things that happen 17 after the medication is given, and it was my belief 18 that it was improper to accept a confession from 19 somebody who had been medicated against his will 20 with a medication that prohibited him from 21 understanding his Miranda rights.</p> <p>22 Q. So the Reid case involved both questions of 23 dynamics and kinetics?</p> <p>24 A. Correct.</p>
<p style="text-align: right;">Page 7</p> <p>1 of the drugs?</p> <p>2 A. Yes.</p> <p>3 Q. Doctor, can you describe for the court your 4 background as an expert witness in terms of the 5 testimony that you have provided in cases either for 6 the government or against the government?</p> <p>7 A. Well, with regard to the cases involving 8 lethal injection, I have been an expert on behalf of 9 the, either the attorney general's office or the 10 department of corrections in about a dozen and a 11 half states.</p> <p>12 Q. And while I am thinking about it, were you 13 also an expert in the Baze case?</p> <p>14 A. Yes.</p> <p>15 Q. And for whom did you testify in Baze?</p> <p>16 A. On behalf of the Commonwealth of Kentucky.</p> <p>17 Q. Have you also at times outside of the 18 context of lethal-injection protocols, testified on 19 behalf of defendants in criminal cases?</p> <p>20 A. There's been a couple of cases where I 21 testified on behalf of defendants. The one that 22 comes to mind is I was an expert on behalf of 23 defendant Richard Reid, who was perhaps more 24 commonly known as the Shoe Bomber.</p>	<p style="text-align: right;">Page 9</p> <p>1 Q. Doctor, you have previously submitted 2 affidavits in this case, one dated 18 September, 3 2012, and another dated 9 February, 2012, and I will 4 show those to you briefly.</p> <p>5 MR. FULTON: February and September?</p> <p>6 MR. SWEDLUND: February and September, 7 correct.</p> <p>8 Q. Doctor, do those affidavits contain 9 opinions that you have held about the protocol at 10 issue in this case?</p> <p>11 A. Yes.</p> <p>12 Q. And are those opinions still current?</p> <p>13 A. Yes.</p> <p>14 Q. If you would please, doctor, could you 15 explain the effects of 5 grams of pentobarbital 16 administered as set forth in South Dakota's lethal 17 injection protocol, what dynamic effect and what 18 kinetic effect would that drug have?</p> <p>19 A. First of all, from a kinetic point of view, 20 when pentobarbital is injected intravenously, it has 21 an onset of effect that is almost immediate. Within 22 thirty to forty-five seconds after the drug reaches 23 the brain, the person would be expected to lose 24 consciousness.</p>

3 (Pages 6 to 9)

KACZYNSKI REPORTING

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<p style="text-align: right;">Page 10</p> <p>1 In addition, there are profound effects 2 caused by pentobarbital on the circulatory system, 3 and it's going to cause dilation of the blood 4 vessels, which means relaxation of the blood vessels 5 that is going to cause a reduction in blood 6 pressure, and there's going to be effect on the 7 heart to decrease the strength of the heart's 8 ability to beat, so with a dose as large as 5000 9 milligrams or 5 grams, within a short period of time 10 not only is the person as deeply unconscious as can 11 be measured with the instruments that we have, that 12 person's blood pressure is going to be 13 extraordinarily low, possibly unmeasurable, and 14 there will be extremely little, if any, circulation 15 throughout the body. 16 Q. And in this unconscious state, can an 17 inmate feel pain? 18 A. No. 19 Q. Why not? 20 A. In the level of anesthesia that 5000 21 milligrams of pentobarbital produces, this is 22 actually a state much deeper than the state of 23 surgical anesthesia that we anesthesiologists 24 produce during anesthesia for surgical procedures.</p>	<p style="text-align: right;">Page 12</p> <p>1 two inmates at issue in those affidavits? 2 A. Well, to summarize what Warden Weber said 3 was shortly after the drug was administered, the 4 inmates took a last breath, typically a deep breath, 5 and then were immobile. 6 Q. Did the inmates snore? 7 A. I think he said that there was one that 8 took a, the last breath was like a snoring-type 9 breath. Let me just -- in the case of Robert, his 10 last breath he described as expelling a snore. 11 Q. Would a snore be consistent with the onset 12 of unconsciousness? 13 A. It probably came afterward. 14 Q. And then, doctor, could you describe for 15 the court, in your practice, have you seen instances 16 where patients have their eyes open still after they 17 have been administered anesthesia? 18 A. Yes, sometimes eyes remain open, even in a 19 person who is deeply anesthetized, there may be 20 mechanical reasons why the eyelids don't cover the 21 eyes when the person loses consciousness, and as an 22 anesthesiologist, since one of my responsibilities 23 is to protect the eyes, I often tape or cover them 24 during surgery in order to protect them.</p>
<p style="text-align: right;">Page 11</p> <p>1 Q. So as the inmate goes into respiratory 2 arrest, suffocates, the inmate is not feeling any 3 pain? 4 A. Yeah, that is correct. So the 5 pentobarbital will have this profound effect to 6 decrease circulation, it will stop breathing 7 typically within a minute or two of its 8 administration, and the person will die due to the 9 effects of decreased oxygen delivery to critical 10 organs in the body, the heart and the brain, and 11 there is a decreased delivery of oxygen, both 12 because the person is not breathing and exchanging 13 oxygen, as well as the fact that the circulation is 14 depressed. 15 Q. Doctor, I have previously provided you with 16 affidavits from the respondent in this case, Doug 17 Weber, one dated the 22nd of October, 2012, the 18 second dated 1st of November, 2012. I will show 19 these to you, do you recognize those affidavits? 20 A. Yes. 21 Q. Have you reviewed them? 22 A. Yes. 23 Q. And can you describe for the court the 24 outward physical, I guess behaviors exhibited by the</p>	<p style="text-align: right;">Page 13</p> <p>1 Q. What mechanical issues are you talking 2 about might account for a patient not closing their 3 eyes even though they are under anesthesia? 4 A. So when a person is lying on their back, 5 gravity does not pull the eyelid down, and the 6 residual muscle tone in both the muscles that raise 7 the eyelid and lower the eyelid may be balanced in 8 such a way that the eyelid does not cover the eye. 9 Q. If a patient, or in this case a condemned 10 inmate's eyes are open, is that any indication that 11 the patient is conscious and feeling pain? 12 A. Not at all. 13 Q. If an anesthetized patient, or in this case 14 an inmate, a condemned inmate has, takes final deep 15 breaths, or if one were to characterize those as 16 gasps, would those be an indication that the inmate 17 is experiencing pain? 18 A. No. 19 Q. Why not? 20 A. When somebody has drug-induced respiratory 21 arrest, it is actually common that the last breath 22 they take before becoming apneic, which is the 23 cessation of ventilation, that last breath is very 24 often a very deep one, and I see that regularly in</p>

4 (Pages 10 to 13)

KACZYNSKI REPORTING

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DR. MARK DERSHWITZ-12/3/12

<p style="text-align: right;">Page 18</p> <p>1 you are using on a patient is pure, effective and</p> <p>2 sterile?</p> <p>3 A. Yes.</p> <p>4 Q. And again, your standard of care in your</p> <p>5 profession does not require you to go back behind</p> <p>6 the licensure and make sure that that licensing was</p> <p>7 validly given by the FDA before you would use a</p> <p>8 drug?</p> <p>9 A. Well, I believe the pharmacies are not</p> <p>10 licensed by FDA, they're licensed by the state, but</p> <p>11 yes, I rely on the local authorities to make sure</p> <p>12 that the supply chain is indeed safe.</p> <p>13 Q. That would be for the compounding</p> <p>14 pharmacist?</p> <p>15 A. Yes.</p> <p>16 Q. You rely on the state pharmacy board to</p> <p>17 properly license the pharmacist from whom you</p> <p>18 acquire your drugs?</p> <p>19 A. Yes.</p> <p>20 Q. And you rely on the FDA to properly license</p> <p>21 the drug manufacturer, suppliers from whom you</p> <p>22 receive your drugs?</p> <p>23 A. Yes.</p> <p>24 Q. Doctor, have you had an opportunity to</p>	<p style="text-align: right;">Page 20</p> <p>1 pentobarbital protocol.</p> <p>2 A. Yeah, so with regard to the one-drug</p> <p>3 protocol with pentobarbital, the protocol simply</p> <p>4 states that 5000 milligrams will be injected, and</p> <p>5 after a period of time has elapsed, then the inmate</p> <p>6 will be examined for the presence of death.</p> <p>7 Q. And does the protocol in your opinion</p> <p>8 provide sufficient assurance regarding the</p> <p>9 qualifications of the persons who will set and</p> <p>10 administer the drugs?</p> <p>11 A. I believe so, although that is actually an</p> <p>12 area that is outside of my expertise in terms of</p> <p>13 vetting other individuals, but the fact that they</p> <p>14 are healthcare providers who do these procedures in</p> <p>15 their normal job is appropriate.</p> <p>16 Q. So for example, the person who sets the IV</p> <p>17 line is an EMT by profession and currently certified</p> <p>18 and licensed, that person would in your opinion be</p> <p>19 capable of setting an IV line?</p> <p>20 MR. FULTON: I would just before you</p> <p>21 answer, doctor, object to foundation given that he</p> <p>22 stated it's beyond his area of expertise. Sorry to</p> <p>23 interrupt him.</p> <p>24 Q. Go ahead.</p>
<p style="text-align: right;">Page 19</p> <p>1 review South Dakota's lethal injection protocol?</p> <p>2 A. Yes.</p> <p>3 Q. And I will provide you a copy. At least, I</p> <p>4 think I will. Where is my copy?</p> <p>5 MR. FULTON: I have that one marked if</p> <p>6 you want to use it, Paul.</p> <p>7 MR. SWEDLUND: Yes, if I could, Thank</p> <p>8 you. It's supposed to be right here.</p> <p>9 Q. Do you have the protocol ERMA.12.B before</p> <p>10 you?</p> <p>11 A. Yes.</p> <p>12 Q. And you reviewed that and you recognize it?</p> <p>13 A. Yes.</p> <p>14 Q. Do you have an opinion regarding whether</p> <p>15 ERMA.12.B if performed as written would provide a</p> <p>16 painless and humane death for a condemned inmate in</p> <p>17 South Dakota?</p> <p>18 A. It would.</p> <p>19 Q. And what is it about the protocol that</p> <p>20 provides you the assurance that the inmate to whom</p> <p>21 the protocol is administered would experience a</p> <p>22 painless and humane death?</p> <p>23 A. Does this apply to all versions of the --</p> <p>24 Q. We're talking only about the one drug</p>	<p style="text-align: right;">Page 21</p> <p>1 A. I think in general when one considers the</p> <p>2 broad population of EMTs, many of them are trained</p> <p>3 to insert intravenous catheters. I have no specific</p> <p>4 knowledge of the person who may do it based upon</p> <p>5 this protocol.</p> <p>6 Q. Okay. In the operation-room setting, who</p> <p>7 are the people that set an IV line for anesthesia?</p> <p>8 A. It could be one of two or three populations</p> <p>9 of people, it could be the attending</p> <p>10 anesthesiologist, it could be the resident</p> <p>11 anesthesiologist or nurse anesthetist who is working</p> <p>12 under the direction of the anesthesiologist, or it</p> <p>13 could be a nurse who is preparing the patient before</p> <p>14 they're transported to the operating room.</p> <p>15 Q. And while we have you here, doctor, if you</p> <p>16 could look at the two-drug protocol as well, and I</p> <p>17 assume that that would be administered using</p> <p>18 pentobarbital in a combined with a paralytic agent;</p> <p>19 are your opinions the same as regards to the ability</p> <p>20 of South Dakota's two-drug protocol to provide a</p> <p>21 painless and humane death for an inmate?</p> <p>22 A. Yes.</p> <p>23 MR. SWEDLUND: I have nothing further.</p> <p>24 THE WITNESS: Before we go on, could we</p>

6 (Pages 18 to 21)

KACZYNSKI REPORTING

1090

Seventh Judicial Circuit Court

PO Box 230
Rapid City SD 57709-0230
(605) 394-2571

CIRCUIT JUDGES

Jeff W. Davis
Wally Eklund
Janine M. Kern
Robert A. Mandel
Craig Pfeifle
Thomas L. Trimble

MAGISTRATE JUDGES

Scott M. Bogue
Heidi Linggren
Shawn J. Pahlke

COURT ADMINISTRATOR

Kristi K. Wammen
STAFF ATTORNEY
Marya V. Tellinghuisen

February 27, 2013

Mr. Paul Swedlund
Sheri Wald Sundem
Attorney General's Office
1302 E. Hwy. 14 #1
Pierre, SD 57501

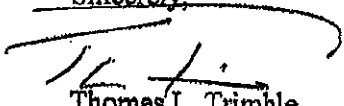
Mr. Neil Fulton
Federal Public Defender's Office
P.O. Box 1258
Pierre, SD 57501

Re: Decision (Civ. File 02-924)

Dear Counsel:

Enclosed please find my amended final decision in the Rhines' matter. Please prepare the appropriate findings of fact, objections and proposed Orders related to the decision.

Sincerely,


Thomas L. Trimble
Circuit Judge
Seventh Judicial Circuit

TLT*mvt

Pennington County, SD
FILED
IN CIRCUIT COURT

FEB 27 2013

Renee Truman, Clerk of Courts
By  Deputy

EXHIBIT

4

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF PENNINGTON)

IN CIRCUIT COURT
SEVENTH JUDICIAL CIRCUIT

File No. Civ. 02-924

CHARLES RUSSELL RHINES)
)
Petitioner,)
)
)
)
)
DOUGLAS WEBER, Warden, South)
Dakota State Penitentiary,)
)
Respondent.)

**AMENDED
MEMORANDUM DECISION
ON CHALLENGE TO
SOUTH DAKOTA'S
EXECUTION PROTOCOL
AND ORDER**

I. PROCEDURAL AND FACTUAL BACKGROUND

The extensive procedural and factual background of this habeas petition was set forth in the Motion to Dismiss/Summary Judgment decision filed on September 17, 2012. Summary Judgment was denied as to Petitioner's Counts 8, 11 and 12. On December 18, 2012, a hearing was held for the purpose of receiving evidence as to those remaining claims. Both parties submitted exhibits including deposition testimony. Petitioner's objections to Exhibits 7R, 8R, 9R, 10R, and 25R are sustained. The admission of this evidence was not stipulated to by the parties nor was the information elicited from any witness. No live witnesses were called at the hearing. Most of the exhibits referenced in this decision are all sealed; therefore, references will be to the numbers/letters in the sealed court file. The issues remaining are:

Ground Eight:

¶28 The manner of execution as provided by SDCL 23A-27A-32 as in effect at the time Charles R. Rhines' conviction violated his rights to due process of law and constitutes cruel and unusual punishment under the Eighth Amendment of the United States Constitution and the corresponding Article under the South Dakota Constitution:

- a. Executions are unconstitutional if they involve unnecessary and wanton infliction of pain or torture or lingering death.
- b. Where pain is inflicted in an execution results from something more than the mere extinguishment of life, the United States Constitution Eighth Amendment and the corresponding South Dakota articles' prohibition against cruel and unusual punishment are implicated.
- c. Given the two chemicals specified in SDCL 23A-27A-32 in effect at the time of Charles R. Rhines' conviction and the absence of a person trained to administer and monitor

anesthesia, it is reasonably foreseeable that Charles R. Rhines may experience suffocation and excruciating pain during his execution in violation of the Eighth Amendment and the corresponding South Dakota Amendment.

d. An execution pursuant to SDCL 23A-27A-23 as codified on the date of Charles R. Rhines' conviction violates the United States Constitution and the South Dakota Constitution prohibition against cruel and unusual punishment and is therefore unconstitutional.

Ground Eleven:

¶ 31 The execution of Charles R. Rhines by lethal injection as set forth in the present SDCL 23A-27A-32 violates Rhines' rights to due process under law and his rights against cruel and unusual punishment guaranteed under the United States Constitution and the South Dakota Constitution.

a. SDCL 23A-27A-32 was amended by the South Dakota Legislature during the 2007 legislative session.

b. On information and belief, the South Dakota Legislature rejected proposed amendments requiring executions be carried out in the most humane manner possible.

c. SDCL 23A-27A-32 removes the requirement of a physician participation in the execution process.

d. Executions are unconstitutional if they involve unnecessary and wanton infliction of pain or torture or lingering death.

e. Where pain inflicted in an execution results from something more than the mere extinguishment of life, the constitutions of the United States and South Dakota, South Dakota Articles prohibition against cruel and unusual punishment are implicated.

¶ 32 Upon information and belief, the protocol presently in effect for lethal injection execution uses a three drug cocktail.

¶ 33 With the three drug cocktail presently believed to be used in executions, in the absence of a person trained to administer and monitor an anesthesia, it is reasonably foreseeable that Charles R. Rhines may experience suffocation and excruciating pain during his execution in violation of the Constitutions of the United States and South Dakota.

¶ 34 An execution pursuant to the present SDCL 23A-27A-32 violates the United States Constitution and the South Dakota Constitution's prohibition against cruel and unusual punishment and it is therefore unconstitutional.

Ground Twelve:

¶35 Charles R. Rhines' right to due process of law against cruel and unusual punishment is guaranteed under the United States Constitution and the South Dakota Constitution is violated by the statutory procedure set forth in 23A-27A-32.

a. SDCL 23A-27A-32 was passed by the South Dakota legislature during the 2007 legislative session.

b. SDCL 23A-27A-32 was amended in two specific areas: it removed the specifications of the two drug cocktail to be used in the lethal injection by the prior statute, and substituted in its place the requirement that the Warden should determine the substances and the quantity of substances used for the punishment of death. The statute provided no other detail recording the Warden's decision. The second change was that a physician was no longer required to participate in the execution process.

¶36 Executions are unconstitutional if they involve unnecessary and wanton infliction of pain or torture or lingering death.

a. Pain inflicted in an execution results from something more than the mere extinguishment of life, the United States Constitution and the South Dakota Constitution is prohibition against cruel and unusual punishment is implicated.

b. On information and belief, the South Dakota legislature rejected proposed amendments requiring executions to be carried out in the most humane manner possible.

¶37 Given the fact that the Warden is given no guidance as to the type of substances used or the quality of substances used for the punishment of death, and there is no requirement by law that the execution be carried out in a humane manner, and the absence of a person trained to administer and monitor an anesthesia, it is reasonably foreseeable that Charles R. Rhines may experience suffocation and excruciating pain during his execution, as allowed under the present statute.

¶38 An execution pursuant to the present SDCL 23A-27A-32 violates the United States Constitution and the South Dakota Constitution prohibition against cruel and unusual punishment and therefore is unconstitutional.

Essentially, Petitioner's claims can be summarized into two issues. First, whether the lethal injection protocol adopted and implemented by the State of South Dakota complies with the mandates of the United States Supreme Court as set forth in the *Baze v. Rees* case? And, secondly, whether the lethal injection protocol violates Article VI, §23 of the South Dakota Constitution? The Petitioner's claims will be addressed separately below. All other issues raised by Petitioner in his Writ of Habeas Corpus have been addressed in the Memorandum Decision On Motion To Dismiss Or For Summary Judgment issued in September, 2012.

II. ANALYSIS

History of the Death Penalty and its application in South Dakota

Over South Dakota's history as both a territory and a state, 18 men have been executed. When South Dakota was first settled and was still Dakota Territory, hangings were the preferred method of execution. Between 1877 and 1915, 14 men were executed by hanging in South Dakota. See Dept. of Corrections, <http://doc.sd.gov/about/faq/capitolpunishment.aspx>. The first was Jack McCall, the killer of Wild Bill Hickok, who was hanged in 1877. While hanging was the most "universal method of execution" in the United States during this time, the Governor of New York commissioned a panel to find:

the most humane and practical method known to modern science of carrying into effect the sentence of death, " New York became the first State to authorize electrocution as a form of capital punishment. *Glass v. Louisiana*, 471 U.S. 1080, 1082, and n. 4, 105 S.Ct. 2159, 85 L.Ed.2d 514 (1985) (Brennan, J., dissenting from denial of certiorari); *Denno*, supra, at 373. By 1915, 11 other States had followed suit, motivated by the "well-grounded belief that electrocution is less painful and more humane than hanging." *Malloy v. South Carolina*, 237 U.S. 180, 185, 35 S.Ct. 507, 59 L.Ed. 905 (1915).

Baze v. Rees, 553 U.S. 35, 42, 128 S.Ct. 1520, 1526 (2008).

Executions by hanging continued in South Dakota until the death penalty was abolished in 1915. See, 1915 S.L. Ch. 158, H.B. 21. In 1933, the death penalty was reinstated and the electric chair became the sole method of execution. In 1947, George Sitts was convicted of murdering DCI agent Tom Matthews who was attempting to arrest Sitts on a fugitive warrant from Minnesota. He also killed Butte County Sheriff Dave Malcolm; however, he was first tried for Matthew's murder and after he was sentenced to death, the state did not try him for Malcolm's murder. See, *State v. Sitts*, 71 S.D. 494, 26 N.W.2d 187 (1947). He was the first and only person executed by electric chair in South Dakota.

In *Furman v. Georgia*, 408 U.S. 238, 92 S.Ct. 2726, 33 L.Ed.2d 346 (1972), the United States Supreme Court held a Georgia death penalty statute violated the 8th and 14th Amendments prohibiting cruel and unusual punishment:

Petitioner in No. 69-5003 was convicted of murder in Georgia and was sentenced to death pursuant to Ga.Code Ann. s 26-1005 (Supp.1971) (effective prior to July 1, 1969). 225 Ga. 253, 167 S.E.2d 628 (1969). Petitioner in No. 69-5030 was convicted of rape in Georgia and was sentenced to death pursuant to Ga.Code Ann. s 26-1302 (Supp.1971) (effective prior to July 1, 1969). 225 Ga. 790, 171 S.E.2d 501 (1969). Petitioner in No. 69-5031 was convicted of rape in Texas and was sentenced to death pursuant to Vernon's Tex.Penal Code, Art. 1189 (1961). 447 S.W.2d 932 (Ct.Crim.App.1969). Certiorari was granted limited to the following question: 'Does the imposition and carrying out of the death penalty in (these cases) constitute cruel and unusual punishment in violation of the Eighth and Fourteenth Amendments?' 403 U.S. 952, 91 S.Ct. 2287, 29 L.Ed.2d 863 (1971). The Court holds that the imposition and carrying out of the death penalty in

these cases constitute cruel and unusual punishment in violation of the Eighth and Fourteenth Amendments. The judgment in each case is therefore reversed insofar as it leaves undisturbed the death sentence imposed, and the cases are remanded for further proceedings. So ordered.

Id. (emphasis added.) The court issued a per curiam decision which was less than one page long which reversed the imposition of the death penalty on the three consolidated cases. Justices Douglas, Brennan, Stewart, White and Marshall each wrote separate opinions in support of the judgments. Justices Blackmun, Powell and Renquist each filed separate dissents. The problem the Court had in the *Furman* case was that there were no standards for a jury to apply to the death penalty determination:

Thus, these discretionary statutes are unconstitutional in their operation. They are pregnant with discrimination and discrimination is an ingredient not compatible with the idea of equal protection of the laws that is implicit in the ban on 'cruel and unusual' punishments.

Any law which is nondiscriminatory on its face may be applied in such a way as to violate the Equal Protection Clause of the Fourteenth Amendment. *Yick Wo v. Hopkins*, 118 U.S. 356, 6 S.Ct. 1064, 30 L.Ed. 220. Such conceivably might be the fate of a mandatory death penalty, where equal or lesser sentences were imposed on the elite, a harsher one on the minorities or members of the lower castes. Whether a mandatory death penalty would otherwise be constitutional is a question I do not reach.

Furman v. Georgia, 408 U.S. 238, 257, 92 S.Ct. 2726, 2736 (Ga. 1972) Justice Douglas concurring.

This case led to a de facto nationwide moratorium on the death penalty for 9 years. See, *Baze v. Rees*, 553 U.S. 35, 42, 128 S.Ct. 1520, 1526. That moratorium ended with the United States Supreme Court's decision in *Gregg v. Georgia*. 428 U.S. 153, 96 S.Ct. 2909, 49 L.Ed.2d 859 (1976). *Id.* That decision held that the "statutory system under which Gregg was sentenced to death does not violate the Constitution." *Gregg*, 428 U.S. 207, 96 S.Ct. 2941. As a result of the *Gregg* case, state legislatures began reexamining electrocution as a "means of assuring a humane death." *Baze*, 553 U.S. 42, 128 S.Ct. 1526. In order to eliminate the issues the Court found in the *Furman* case, Georgia enacted a statutory scheme for the imposition of the death penalty. *Gregg*, 428 U.S. 161, 96 S.Ct. 2920. The trial was bifurcated into the guilt or innocence phase by either a judge or jury. *Id.* After a guilty verdict or finding, a presentence hearing was conducted before whoever made the guilt determination. *Id.*

"(T)he judge (or jury) shall hear additional evidence in extenuation, mitigation, and aggravation of punishment, including the record of any prior criminal convictions and pleas of guilty or pleas of nolo contendere of the defendant, or the absence of any prior conviction and pleas: Provided, however, that only such evidence in aggravation as the State has made known to the defendant prior to his trial shall be admissible. The judge (or jury) shall also hear argument by the defendant or his counsel and the prosecuting attorney . . . regarding the punishment to be imposed." s 27-2503. (Supp.1975).

The defendant is accorded substantial latitude as to the types of evidence that he may introduce. See *Brown v. State*, 235 Ga. 644, 647-650, 220 S.Ed.2d 922, 925-926 (1975). Evidence considered during the guilt stage may be considered during the sentencing stage without being resubmitted. *Eberheart v. State*, 232 Ga. 247, 253, 206 S.E.2d 12, 17 (1974).

Gregg, 428 U.S. 163-164, 96 S.Ct. 2920-21.

Furthermore, under the statutory scheme, the jury or court must have also found beyond a reasonable doubt, at least one aggravating circumstance as found in the statute. The statutory scheme also included an expedited direct review by the Georgia Supreme Court. If the Court affirmed the death sentence, then it was required to reference similar cases it took into consideration. *Gregg*, 428 U.S. 167, 96 S.Ct. 2922.

Interestingly, part of the Supreme Court's decision in *Gregg* looked at the history of the death penalty:

It is clear from the foregoing precedents that the Eighth Amendment has not been regarded as a static concept. As Mr. Chief Justice Warren said, in an oft-quoted phrase, "(t)he Amendment must draw its meaning from the evolving standards of decency that mark the progress of a maturing society." *Trop v. Dulles*, Supra, 356 U.S. at 101, 78 S.Ct., at 598. See also *Jackson v. Bishop*, 404 F.2d 571, 579 (CA 8 1968). Cf. *Robinson v. California*, supra, 370 U.S., at 666, 82 S.Ct., at 1420. Thus, an assessment of contemporary values concerning the infliction of a challenged sanction is relevant to the application of the Eighth Amendment. As we develop below more fully, see *Infra*, at 2926-2927, this assessment does not call for a subjective judgment. It requires, rather, that we look to objective indicia that reflect the public attitude toward a given sanction.

Gregg, 428 U.S. 173, 96 S.Ct. 2925. The Court further examined the role of the judiciary in determining the constitutionality of a legislative enactment:

But, while we have an obligation to insure that constitutional bounds are not overreached, we may not act as judges as we might as legislators.

"Courts are not representative bodies. They are not designed to be a good reflex of a democratic society. Their judgment is best informed, and therefore most dependable, within narrow limits. Their essential quality is detachment, founded on independence. History teaches that the independence of the judiciary is jeopardized when courts become embroiled in the passions of the day and assume primary responsibility in choosing between competing political, economic and social pressures." *Dennis v. United States*, 341 U.S. 494, 525, 71 S.Ct. 857, 875, 95 L.Ed. 1137 (1951) (Frankfurter, J., concurring in affirmance of judgment).

Therefore, in assessing a punishment selected by a democratically elected legislature against the constitutional measure, we presume its validity. We may not require the legislature to select the least severe penalty possible so long as the penalty selected is not

cruelly inhumane or disproportionate to the crime involved. And a heavy burden rests on those who would attack the judgment of the representatives of the people.

Gregg, 428 U.S. 175, 96 S.Ct. 2926.

Ultimately, the *Gregg* court upheld Georgia's death penalty statutes:

In summary, the concerns expressed in *Furman* that the penalty of death not be imposed in an arbitrary or capricious manner can be met by a carefully drafted statute that ensures that the sentencing authority is given adequate information and guidance. As a general proposition these concerns are best met by a system that provides for a bifurcated proceeding at which the sentencing authority is apprised of the information relevant to the imposition of sentence and provided with standards to guide its use of the information.

Gregg, 428 U.S. 195, 96 S.Ct. 2935.

Following the *Gregg* decision, a new version of the death penalty was enacted in South Dakota in 1979. See 1979 SB 53; see former SDCL 22-6-1 (1979); SDCL 22-16-9 (1979). SDCL 22-19-1 (1979). This statutory scheme embraced the dictates of *Gregg* and provided for aggravating circumstances, a mitigation hearing, an expedited direct review and a proportionality review of the sentence. No one in South Dakota was executed between the 1947 electrocution of Sitts and the 2007 execution of Elijah Page by lethal injection.

The South Dakota legislature amended SDCL 23A-27A-32 in 2007 to provide for execution "by the intravenous injection of a substance or substances in a lethal quantity." The statute instructed the "Warden, subject to the approval of the secretary of corrections, [to] determine the substances and quantity of substances used for the punishment of death." SDCL 23A-27A-32.

Per the directives given to him by SDCL 23A-27A-32, the Warden promulgated a policy effective June 14, 2007, providing for execution by: (1) "Sodium Pentothal, (aka Sodium Thiopental)...in a quantity sufficient to ensure the inmate is and remains unconscious and is not subjected to the unnecessary and wanton infliction of pain;" (2) Pancuronium Bromide to stop the inmate's breathing, and; (3) Potassium Chloride to stop the inmate's heart. See Exhibit 3.

Subsequent to formulating the June 14, 2007, protocol, the United States Supreme Court's *Baze* decision detailed the safeguards the court deemed constitutionally sufficient to protect condemned inmates from anesthetic maladministration. *Baze v. Rees*, 553 U.S. 54-61, 128 S.Ct. 1533-1538. As a result, the Warden consulted with legal counsel to determine what changes should be made to the June 2007 policy. The DOC revised the policy in August 2010 to incorporate further safeguards against anesthetic maladministration mandated by *Baze*. See Weber Affidavit, Exhibit 3R, ¶¶ 6-8. The revised protocol called for execution by the same three chemicals as originally specified in the June 14, 2007, protocol, but with newly specified dosages. *Id.* at ¶8.

In response to emerging judicial acceptance of pentobarbital as an execution anesthetic, the Warden again modified the protocol in October of 2011 to provide for execution via a one-drug, pentobarbital protocol for all prospective executions. *Id.* at ¶9. South Dakota has now joined Ohio, Washington, Idaho, Oklahoma and Pennsylvania with having a one drug protocol. While the October 13, 2011, protocol retains three and two drug options utilizing sodium thiopental, those exist as backup procedures should future circumstances require DOC to revert to those earlier procedures.

After the executions of Eric Robert and Donald Moeller in October 2012, the Warden modified the protocol slightly to provide inmates with express assurance that any compounded execution drugs would be prepared according to the governing standards of the United States Pharmacopeia. The November 2012 protocol retains *Baze*'s safeguards for the proper administration of the anesthetic. See Exhibit 2R.

Issue One

Whether Petitioner's challenge to the lethal injection protocol adopted and implemented by the State of South Dakota as set forth in detail in Petitioner's Habeas Petition Grounds 8, 11 and 12, complies with the mandates of the United States Supreme Court as set forth in the *Baze v. Rees* and the Eighth Amendment to the United States Constitution?

A. *Baze v. Rees* and Substantial Risk of Serious Harm and Suffering

Petitioner claims that the lethal injection protocol adopted and implemented by South Dakota "does not adequately guard against substantial risk of serious harm and suffering." See Petitioner's Pretrial Brief, p. 1. Petitioner further argues that South Dakota has not "chosen individuals to carry out the execution who have adequate and appropriate training and experience to guard against that risk." *Id.*

Like *Baze*, where the United States Supreme Court addressed whether Kentucky's three-drug lethal injection method of capital punishment posed an unacceptable risk of significant pain and was cruel and unusual punishment under the Eighth Amendment, Rhines' argument centers on the risk of serious harm and suffering. *Baze v. Rees*, 553 U.S. 35, 128 S.Ct. 1520 (2008). Ultimately, the Court held that Kentucky's method of capital punishment satisfied the Eighth Amendment:

The Eighth Amendment to the Constitution, applicable to the States through the Due Process Clause of the Fourteenth Amendment, see *Robinson v. California*, 370 U.S. 660, 666, 82 S.Ct. 1417, 8 L.Ed.2d 758 (1962), provides that "[e]xcessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted." We begin with the principle, settled by *Gregg*, that capital punishment is constitutional. See 428 U.S., at 177, 96 S.Ct. 2909 (joint opinion of Stewart, Powell, and STEVENS, JJ.). It necessarily follows that there must be a means of carrying it out. Some risk of pain is inherent in any method of execution—no matter how humane—if only from the

prospect of error in following the required procedure. It is clear, then, that the Constitution does not demand the avoidance of all risk of pain in carrying out executions.

(emphasis added), *Id.*, 553 U.S. 47, 128 S.Ct. 1529. Thus, Rhines does not challenge lethal injection per se. Rather, the challenge is to the protocol and the manner in which the execution is carried out. Petitioner argues that there is a significant risk that the drugs will not be properly administered which will lead to severe pain when the other chemicals are administered and therefore, the possibility of improper administration of the drugs would be violative of the Eighth Amendment. However, the Supreme Court has held that in order to prevail on a claim of cruel and unusual punishment there must be "substantial risk of serious harm":

To establish that such exposure violates the Eighth Amendment, however, the conditions presenting the risk must be "sure or very likely to cause serious illness and needless suffering," and give rise to "sufficiently imminent dangers." *Helling v. McKinney*, 509 U.S. 25, 33, 34-35, 113 S.Ct. 2475, 125 L.Ed.2d 22 (1993) (emphasis added). We have explained that to prevail on such a claim there must be a "substantial risk of serious harm," an "objectively intolerable risk of harm" that prevents prison officials from pleading that they were "subjectively blameless for purposes of the Eighth Amendment." *Farmer v. Brennan*, 511 U.S. 825, 842, 846, and n. 9, 114 S.Ct. 1970, 128 L.Ed.2d 811 (1994).

Baze v. Rees, 553 U.S. 49-50, 128 S.Ct. 1530-31. The Court further explained that "simply because an execution method may result in pain...does not establish the sort of 'objectively intolerable risk of harm' that qualifies as cruel and unusual." *Id.* It is important to note that following *Baze*, no federal appellate court has invalidated a lethal injection protocol under the Eighth Amendment. *Cooley v. Strickland*, 589 F.3d 210, 221 (6th Cir. 2009); *Nooner v. Norris*, 594 F.3d 592, 596 (8th Cir. 2010); *Clemens v. Crawford*, 585 F.3d 1119, 1124 (8th Cir. 2007).

The *Cooley* court explained in detail what *Baze* does not require:

In thinking about what *Baze* requires, it is helpful to remember what it does not. The opinion contains several controlling premises within which *Biros* must formulate his challenge: Capital punishment is constitutional, see *id.* at 1529; death-row inmates cannot use method-of-execution challenges to prohibit what the Constitution allows, *id.*; "the Constitution does not demand" a pain-free execution, *id.* at 1529, 1537; and an inmate cannot question a state's execution protocol without providing "feasible, readily implemented" alternatives that "significantly reduce a substantial risk of severe pain," see *id.* at 1532 (emphasis added); *id.* at 1531 ("[A] condemned prisoner cannot successfully challenge a State's method of execution merely by showing a slightly or marginally safer alternative."). Significantly, the Constitution does not allow the federal courts to act as a best-practices board empowered to demand that states adopt the least risky execution protocol possible. See *id.* at 1529, 1531. Within this framework, the Supreme Court has never held that an inmate met the "heavy burden" of demonstrating that a state's execution protocol is "cruelly inhumane" in violation of the Constitution. See *id.* at 1533 (citing *Gregg*, 428 U.S. at 175, 96 S.Ct. 2909); see also *id.* at 1529, 1531; *Harbison*, 571 F.3d at 535 (rejecting a challenge to Tennessee's lethal injection protocol after *Baze*).

With these standards in mind, the next step is to compare the *Baze* requirements with South Dakota's protocol to determine whether they are substantially similar and thus, constitutional.

B. South Dakota's Lethal Injection Protocol is Substantially Similar to *Baze* and is Constitutional on its Face

After *Baze* was decided by the United States Supreme Court in 2008, South Dakota's Warden consulted with legal counsel to determine what changes, if any, should be made to South Dakota's existing protocol in order for it to be compliant with the mandates of *Baze*. Department of Corrections revised its existing protocol in August 2010. Weber Protocol Affidavit, Exhibit 3R, ¶¶ 11-14. This revised protocol used the same three-drug protocol approved in *Baze*. In response to emerging judicial acceptance of pentobarbital as an execution anesthetic, South Dakota's Warden again modified the protocol in October of 2011 to provide for execution via a one-drug, pentobarbital protocol for all prospective executions. Exhibit 2R, ERM A.12(B)(H), Weber Protocol Affidavit, Exhibit 3R, ¶14. At that time, South Dakota joined Ohio and Washington in moving to a one-drug protocol. Since then, Idaho, Oklahoma, and Pennsylvania have also adopted a one-drug, pentobarbital protocol.

After the executions of Eric Robert and Donald Moeller in October, 2012, the South Dakota Warden modified the protocol slightly to provide inmates with express assurance that any compounded execution drugs would be prepared according to the governing standards of the United States Pharmacopeia. The November 2012 protocol retains *Baze*'s safeguards for the proper administration of the anesthetic. Exhibit 2R, ERM A.12(B)(D)(1). Those are:

1. The execution is performed under the oversight and command of the Warden, who, by statute and policy is charged with numerous duties to ensure a humane execution. Exhibit 3R, Weber Protocol Affidavit, ¶ 2.
2. The Warden assures that two complete sets of pentobarbital syringes are prepared for the execution. Exhibit 3R, Exhibit 2R, ERM A.12(B)(A)(3).
3. Ambulance staff equipped with advanced life support capabilities, including a heart defibrillator and such supplies and equipment as would be needed to attempt to revive an individual who has been injected with pentobarbital shall be on standby at the SDSP. Exhibit 3R, Exhibit 2R, ERM A.12(B)(A)(5).
4. Execution team members must be qualified to carry out their functions. Persons responsible for inserting the needles and establishing IV lines must be "trained to perform venipuncture and to administer intravenous injections." To meet qualifications, the persons who "connect, monitor, and maintain intravenous lines" must be "certified or licensed and have at least two (2) years professional experience" as one of the following: "medical or osteopathic physician, physician assistant, registered nurse, certified medical assistant, licensed practical

nurse, phlebotomist, paramedic, emergency medical technical, or military corpsman." Exhibit 2R, ERM A.12(B)(B)(1)(3).

5. The person responsible for mixing the drugs, preparing the syringes, and administering the injections must "demonstrate proficiency through relevant training and two years' experience in the administration of drugs by intravenous injection; preparation of syringes for such administration; and mixing and preparing of drugs for such administration." Exhibit 2R, ERM A.12(B)(B)(2).

6. The two sets of chemicals are labeled and contained in numbered syringes. Exhibit 2R, ERM A.12(B)(C)(1).

7. The pentobarbital is mixed or prepared in accordance with USP 797 and is thereafter maintained in accordance with manufacturer's instructions. The pentobarbital must be mixed or prepared in bright, undimmed light. Exhibit 2R, ERM A.12(B)(D)(3); Exhibit 4R, at ¶¶6, 9, 11; Exhibit 5R, Deponent #1 Affidavit at ¶I, Exhibit 3R, Weber Protocol Affidavit, at ¶ 9.

8. DOC staff responsible for performing the execution is required to "drill at least weekly for six to eight weeks prior to the scheduled date of execution," as well as to perform "additional drills the week of the scheduled execution" at the Warden's direction. Exhibit 2R, ERM A.12(B)(D)(1).

9. At least one week prior to the execution, a medical provider examines the inmate and prepares a report "describing the inmate's physical condition and any medical condition of the inmate that may lead to potential problems establishing the IV site." Exhibit 2R, ERM A.12(B)(D)(2).

10. The protocol requires that every effort be made to ensure that no unnecessary pain is inflicted on the inmate. Exhibit 2R, ERM A.12(B)(D)(10).

11. The inmate is secured to the execution gurney in such a position that "at all times" his "head and face are visible to the Warden and to those in the chemical room." Exhibit 2R, ERM A.12(B)(D)(9).

12. The IV team shall establish "two independent IV lines to the inmate's veins. The IV team will establish IV lines only in peripheral veins located in the inmate's arms, hands, legs or feet, preferably one in each arm." Exhibit 2R, ERM A.12(B)(D)(8). The lines must be secured "in such a way as to leave them visible for monitoring."

13. If the IV team "cannot secure one (1) or more sites within one (1) hour," the execution will cease and a request shall be made that the execution be "scheduled for a later date during the week of the execution." Exhibit 2R, ERM A.12(B)(D)(11).

14. The IV team will "start a saline flow and a sufficient quantity of saline solution shall be injected to confirm that the IV lines have been properly inserted and are not obstructed." Exhibit 2R, ERM A.12(B)(D)(12).

15. The Warden stands in the execution chamber with the condemned and issues the order for the execution to proceed from there. Exhibit 2R, ERM A.12(B)(E)(2).

16. The executioner then administers syringe #1 containing 2.5 grams of pentobarbital in a 50 cc solution followed by syringe #2 containing 2.5 grams of pentobarbital in a 50 cc solution followed by syringe #3 containing 25 ml. of normal saline. Exhibit 2R, ERM A.12(B)(C)(3); ERM A.12(B)(H)(4)-(6).

17. The person responsible for pronouncing death monitors the IV lines and the inmate's response to the injection over the next 15 minutes. If the person responsible for pronouncing death is not able to do so after 15 minutes, "the Warden shall order a second set of chemicals to be administered." Exhibit 2R, ERM A.12(B)(H)(7).

18. Ten minutes after the second round of the drug is administered, "[t]he person responsible for pronouncing death shall enter the chamber and confirm death by checking the inmate's heartbeat, breathing, pulse, and pupils." Exhibit 2R, ERM A.12(B)(H)(10).

ERM A.12(B), compare with *Baze*, 553 U.S. at 44-46, 51, 55-56, 128 S.Ct. at 1528, 1531, 1533-34 and *Baze* Protocol, Exhibit 2R, ERM A.12(B).

A comparison of South Dakota's ERM A.12(B) protocol with the *Baze* decision reveals that South Dakota's lethal injection protocol is "substantially similar" to, and in many respects more protective than Kentucky's as set forth in *Baze* and is therefore, constitutional on its face. *Id.* Petitioner has failed to show that the lethal injection protocol adopted by South Dakota "does not adequately guard against substantial risk of serious harm and suffering." Consequently, Rhines' argument set forth in Grounds 8, 11 and 12 that the lethal injection protocol adopted by South Dakota is unconstitutional and violates the 8th Amendment of the United States must fail.

C.

South Dakota Implements its Protocol in a Constitutional Manner

Rhine's also argues in Grounds 8, 11 and 12 of the habeas petition that the manner in which the lethal injection protocol is implemented is unconstitutional. More specifically, Rhines argues:

1) the execution team member known as Witness #3 does not have adequate training and experience to administer the lethal injection protocol; and

2) that execution team member Witness #3 does not have adequate experience and is not placed properly in the execution chamber, to recognize infiltration of the IV line which can result in reduced efficacy of the IV; and

3) that execution team member Witness #3 does not have proper experience and placement to ensure that the IV line is properly set at the outset, to monitor the IV lines in operation, or to place a central line in, if needed, and as called for under the protocol; and

4) that execution team member Witness #2 is charged with administering the lethal injection from a control room separated from the execution chamber; and

5) that execution team member Witness #2 has limited experience in administration of intravenous drugs; and

6) that execution team member Witness #2 lacks the training and experience to recognize if drugs are being taken up by the body in a proper fashion, to monitor the effect of the drugs, to recognize a proper administration rate or to understand the proper handling and administration of barbiturates like pentobarbital; and

7) that the compounded drug is not reliably pure and potent; and

8) that the execution protocol does not guarantee adequate medical monitoring and does not require that individuals with adequate training or experience select the members of the team; and

9) that the protocol creates a system that impermissibly increases the risk of error or mishap which can result in a cruel and unusual execution.

See Petitioner's Pretrial Brief, p. 1-2. Each of these arguments will be addressed below.

I. Witness #3 IV Setter

Witness #3 (also referred to as Deponent #3) is the person responsible for setting the IV lines. BRM A.12(B)(3) describes the qualifications:

The person(s) selected by the Warden to insert the intravenous needles into the veins of the prisoner and connect, monitor, and maintain intravenous lines shall be certified or licensed and have at least two (2) years' professional experience as one of the following: medical or osteopathic physician, physician assistant, registered nurse, certified medical assistant, licensed practical nurse, phlebotomist, paramedic, emergency medical technician, or military corpsman.

These qualifications are consistent with, and even exceed, those set forth in *Baze*. *Baze* approved Kentucky's requirement that the IV setter have one year of professional experience as an EMT. *Baze*, 553 U.S. at 55, 128 S.Ct. at 1533. Kentucky met this requirement by employing an EMT who had "daily experience establishing IV lines for inmates," but neither the Kentucky protocol nor the *Baze* decision require "daily" experience.

Witness #3 who was part of the execution team for the Page, Robert and Moeller executions has a bachelor's degree in health education. Exhibit I at p. 8, line 12. Prior to obtaining his bachelor's degree, he received two years of paramedic training from an accredited institution. Exhibit I at p. 10, lines 3-11. That training included setting IV lines and administering IV drugs. Exhibit I at p. 10, line 15; p. 11, line 2. Witness #3 also worked for 15 years as a field supervisor and response medic on an ambulance. Exhibit I at p. 12, line 11. He then worked as an ambulance response medic before assuming supervisory duties. Exhibit I p. 12, line 19; p. 13, line 6. As part of his job, he is required to go on ambulance calls and to maintain his paramedic certification. Exhibit I at p. 15, line 20.

Witness #3 has been a state certified paramedic for 29 years. Exhibit I at p. 14, line 20, p. 15, line 3, p. 106, line 4. During that time, he has set thousands of IV lines. Exhibit I at p. 106, line 4. He has also participated in numerous executions. Exhibit I at p. 44, line 14. Witness #3 testified that he has never had a complication arise during an execution. Exhibit I at p. 41, line 15. He is also trained to recognize signs of IV malfunctioning, such as swelling, leaking, or discoloration in the lines. Exhibit I at p. 77, line 7; p. 86, lines 10-21; p. 87, line 14-88, 25; p. 89, lines 15-25; p. 100, line 7. If an IV line was malfunctioning, Witness #3 testified that he would switch to the secondary line or start a new one. Exhibit I at p. 81, line 12; p. 87, line 4. Witness #3 stated that in the executions he has participated in, the inmate very quickly becomes lethargic, goes unconscious, takes some labored respirations, then goes into respiratory arrest. Exhibit I at p. 45, line 21; p. 101, line 24. Signs of respiratory arrest are no chest wall movement and no air way sounds. Exhibit I at p. 46, line 7.

Witness #3 clearly is qualified under ERM A.12(B)(3) and the *Baze* decision. Thus, Rhines' arguments that Witness #3 does not have adequate training and experience to administer the lethal injection protocol, does not have adequate experience to recognize infiltration of the IV line and that Witness #3 does not have proper experience and placement to ensure that the IV line is properly set at the outset, to monitor the IV lines in operation, or to place a central line if, if needed, and as called for under the protocol are all without merit.

ii. Witness #2 Drug Administer

Witness #2 is the person responsible for administering the injections. ERM A.12(B)(4) provides:

The person(s) selected by the Warden to administer the injections shall demonstrate proficiency through relevant training and two years' experience in the administration of drugs by intravenous injection.

Again, as with Witness #3, the qualifications required of Witness #2 are consistent with *Baze*. Witness #2 testified that approximately 11 years ago, he began several months of training to administer lethal injection drugs. Exhibit H at p. 18, line 12; p. 19, line 8. Witness #2 received his training from a fellow correctional officer who was experienced in performing lethal injections. Exhibit H at p. 18, line 24. He observed several executions before participating in one. Exhibit H at p. 48, line 10. Since first participating in an execution more than ten years

ago, he has performed numerous executions without complication, including executions using pentobarbital. Exhibit H at p. 112, line 5; p. 20, line 1; p. 36, line 8; p. 103, line 13.

When performing an execution, Witness #2 consults the protocol to learn the drugs which will be used and the concentration. Exhibit H at p. 29, line 22. He checks the drug labels and compares them with the protocol to ensure that he has the correct drugs. Exhibit H at p. 30, line 2; p. 30, line 19. He testified he would not administer a drug that was not in the protocol. Exhibit H at p. 77, line 10; p. 93, line 14. He inspects the condition of the drugs to be administered to make sure they have been stored properly (temperature, sealed, appearance) and also checks the seals on the syringes and IV tubes. Exhibit H at p. 25, line 7; p. 70, line 13; p. 71, line 14; p. 86, line 9. He is also trained to detect catheter site swelling and back pressure on syringes that would suggest poor flow. Exhibit H at p. 105, line 14; p. 106, line 5; p. 106, line 15; p. 107, line 4, 20.

Each time he has administered pentobarbital, Witness #2 has observed no signs that an inmate experienced pain. Exhibit H at p. 83, line 17. He expects to participate in drills prior to performing an execution in South Dakota. Exhibit H at p. 83, line 17.

Witness #2 clearly is qualified under ERM A.12(B)(4) and the *Baze* decision. Rhines' arguments that execution team member Witness #2 is inexperienced and lacks training to recognize if drugs are being taken up by the body in a proper fashion, to monitor the effect of the drugs, to recognize a proper administration rate or to understand the proper handling and administration of barbiturates like pentobarbital are unfounded.

Drug Compounding and Pharmacist Qualifications

Rhines argues that the compounded drug is not reliably pure and potent and therefore, the administration of the protocol poses a substantial risk of severe pain to the inmate. He also argues that the pharmacist is incompetent to compound pentobarbital.

iii. Drug Compounding

At the December hearing, Rhines introduced the trial deposition of Dr. Mark Heath who testified that he was not a pharmacist and that he did not have a high level of expertise in the mechanics of compounding. Trial Exhibit 9 at p. 14, lines 16-25; p. 15, lines 2-6. He stated that his opinions were related to the effect the drug would have if compounded incorrectly. Trial Exhibit 9 at p. 15, line 18. He went on to explain the areas where he believes errors could occur:

In a broad level I think there are two main areas that things can go wrong. One would be that there's a chemical accidentally or inadvertently introduced or formed in the material that could cause an undesired reaction or response, in other words, having an extra thing that sound [sic] shouldn't be there. And the other realm of problem is that should happen to degrade the drug, the pentobarbital that is there so that the amount there is inadequate.

Trial Exhibit 9 at p. 16, lines 3-12. When asked specifically about whether South Dakota's protocol for implementing lethal injection posed a "substantial risk of severe pain to an individual," Dr. Heath testified as follows:

But to clarify, when I talk about a substantial risk, it factored in several things, also the likelihood of it happening and also the gravity or severity of the event were it to occur and also how easily it is to obviate or eliminate the risk. So it's a factor of things, a mix of things. And in this instance, there's a risk of terrible thing [sic] happening. I think everybody would agree that nobody wants the prisoner to end up brain damaged. They wouldn't—probably wouldn't even execute them if that the outcome of an attempted execution. It's unlikely, but it's a terrible thing to have happen, and nothing is a hundred percent preventable. It's more preventable than it currently is. In those terms I would say, it's a substantial risk—unlikely, severe, preventable.

The trial court has great discretion when it comes to the weight to be given to any witness' testimony. Dr. Heath's does not give any testimony regarding the actual compounding of the pentobarbital but rather focuses on the physiological effects that could occur if the drug was compounded incorrectly. But as is shown in his testimony quoted above, he testified that the risk was unlikely.

We have often said that fact finders are not required to accept an expert's opinion. As with all witnesses, it falls on the trier of fact to decide whether to believe all, part, or none of an expert's testimony. *Sauer v. Tiffany Laundry & Dry Cleaners*, 2001 SD 24, ¶ 14, 622 N.W.2d 741, 745 (citations omitted); *Lewton v. McCauley*, 460 N.W.2d 728, 732 (S.D.1990) (citation omitted).

Great Western Bank v. H & E Enterprises, LLP, 2007 S.D. 38, 731 N.W.2d 207. This court does not find Dr. Heath's testimony on whether South Dakota's protocol for implementing lethal injection poses a "substantial risk of severe pain to an individual" to be relevant or useful.

Rhines also relies on the Declaration of Dr. Sarah Sellers who was an expert in the Donald Moeller case. Dr. Sellers is the executive director and consultant for Q-Vigilance, LLC. See Trial Exhibits 1 and 2. She stated that her work focuses on the public health risks of drug compounding. In her opinion, "this pentobarbital sodium API formulated under the indicated ...recipe cannot be used for compounding as doing so would result in risk of serious harm to Mr. Moeller." See Trial Exhibit 2, p. 15, ¶ 5. She did not testify live at Rhines' hearing.

In contrast to Dr. Sellers' testimony, Respondent introduced the trial deposition of Dr. Mark Dershwitz. See Exhibit 26R0. Dr. Dershwitz has a bachelor's degree in chemistry, went to medical school at Northwestern University and also obtained a Ph.D. in pharmacology. Exhibit 26R at p.5, lines 22-24; p. 6, line 1. He did his residency in anesthesiology followed by a research fellowship and he worked in academic anesthesiology since 1986 teaching at Massachusetts General Hospital, Harvard Medical School and Massachusetts Medical School. When asked about the practice of compounding drugs he testified as follows:

Q: Were you aware of allegations in that case [Moeller] by Mr. Moeller's attorneys that compounding drugs was somehow a fringe occupation or an unusual practice in the practice of either pharmacy or medicine:

A: I have heard that allegation, and at least with regard to anesthetic drugs and in my practice, that is just not true.

Q: Insofar as you use compounded drugs in the practice of anesthesia, does the standard of care require you or any other anesthesiologists to trace the drug back to its origins of manufacture before you use it?

A: No, I rely on the pharmacy to properly prepare the medication and label it before they send it to the hospital.

Q: And the standard of care in the practice of anesthesiology permits you to rely on a licensed pharmacist in good standing to provide you with an effective, potent and sterile drug?

A: Yes.

Q: And doctor, does the licensure of a drug supplier, whether they're either a manufacturer or merely a wholesaler, does the FDA licensure of that manufacturer, supplier provide you with sufficient assurance as an anesthesiologist that the drug that you are using on a patient is pure, effective and sterile?

A: Yes.

Exhibit 26R p. 16, lines 23-24-p.18, line 3. Dr. Dershwitz also opined that ERM A.12 (B) if performed as written would provide a painless and humane death. Exhibit 26R, p. 19, line 18. Like Dr. Heath's testimony, this Court does not find Dr. Sellers' testimony to be particularly reliable, relevant or useful. Rather, this Court finds Dr. Dershwitz's, who is an anesthesiologist and has a degree in pharmacology, to be more credible and believable.

We give deference to circuit courts in determining the credibility of a witness. *Hubbard v. City of Pierre*, 2010 S.D. 55, ¶ 26, 784 N.W.2d 499, 511 (reiterating that "the credibility of the witnesses, the import to be accorded their testimony, and the weight of the evidence must be determined by the trial court, and we give due regard to the trial court's opportunity to observe the witnesses and examine the evidence.").

Nemec v. Goeman, 2012 S.D. 14, ¶24, 810 N.W.2d 443, 449. Petitioner has not submitted any credible evidence that the compounded drug is not reliably pure and potent and poses a substantial risk of severe pain to the inmate. In fact, post-compounding testing of pentobarbital used in the Robert and Moeller executions proved that it was, in fact, compounded into a sterile, USP-compliant injectable solution. Exhibit 11R, at ¶V(G); Exhibit 4R, ¶¶9, 11, 12; Exhibit 3R, Weber/Moeller Affidavit at ¶6; Exhibit 5R, Deponent #1 Affidavit at ¶1. Therefore, Rhines'

argument that the compounding of pentobarbital results in a drug that is not reliably pure and potent must fail.

**iv. Witness #1
Compounding Pharmacist**

Rhines further argues that the pharmacist hired to compound the pentobarbital is incompetent. Again, the pharmacist employed for the Robert and Moeller executions meets and surpasses the minimum qualification thresholds set by *Baze*. Witness #1 has a bachelor's degree in pharmaceutical science. His education program required five years of undergraduate/graduate education. Exhibit G, p. 25-28. He also obtains approximately 20 hours a year in continuing education. Exhibit G, p. 25-28. He has specialized training in sterile compounding. Exhibit G, p. 86. He is licensed and registered with a Board of Pharmacy. His pharmacy license and registration are current. Exhibit G, p. 21-22. He has never been investigated for improper compounding practices. Exhibit G, p. 38, 57. He has many years of experience as a working compounding pharmacist. Exhibit G, p. 22, 28. Witness #1 testified that compounded drugs do not require FDA approval like commercial drugs. Exhibit G, p. 41, 155. His pharmacy complies with USP guidelines for sterile compounding. Exhibit G, p. 86, 133-135, 152.

Witness #1 is qualified under ERM A.12(B) and the *Baze* decision. Rhines' argument that the compounded drug is not reliably pure and potent and that the pharmacist is incompetent to compound pentobarbital are without merit.

Issue Two

Whether Petitioner's challenge to the lethal injection protocol adopted and implemented by the State of South Dakota as set forth in detail in Petitioner's Habeas Petition Grounds 8, 11 and 12, violates Article VI, §23 of the South Dakota Constitution prohibition against Cruel and Unusual Punishment?

Rhines' final argument is that the South Dakota State Constitution, Article VI, §23 provides greater protection than the United States Constitution. He further argues that the South Dakota Supreme Court has not addressed the issue of the manner of carrying out the death penalty. The South Dakota Constitution provides in Article VI, §23:

Excessive bail shall not be required, excessive fines imposed, nor cruel punishments inflicted.

While Rhines' argument focuses on the manner of carrying out the death penalty instead of whether the death penalty is unconstitutional, it is clear that the South Dakota Supreme Court has addressed the issue of the death penalty:

The South Dakota Constitution employs slightly different language in limiting the government's power to impose criminal penalties. Article VI, § 23, of the South Dakota Constitution states: "Excessive bail shall not be required, excessive fines imposed, nor cruel punishments inflicted." (Emphasis supplied.) Moeller argues that South Dakota's

constitutional prohibition on "cruel punishments" is a greater restriction on government power than its federal counterpart prohibiting "cruel and unusual punishments." He contends that the death penalty is invariably a "cruel punishment" in violation of this state's constitutional provision.

We note that a state constitution may be interpreted to provide an individual with greater protection than the federal constitution. *State v. Opperman*, 247 N.W.2d 673, 674 (S.D.1976). Additionally, "capital punishment is a matter of particular state interest or local concern and does not require a uniform national policy." *State v. Ramsey*, 106 N.J. 123, 524 A.2d 188, 209 (1987). See also James R. Acker & Elizabeth R. Walsh, *Challenging the Death Penalty Under State Constitutions*, 42 *Vanderbilt LRev* 1299 (1989).

Cognizant of this Court's independent authority to invalidate capital punishment as a matter of state law, we begin our analysis by focusing on our own state's legal and historical precedent. Importantly, the very same constitutional document that prohibits the infliction of cruel punishment contains provisions implicitly recognizing the appropriateness of the death penalty. S.D. Const.Art. VI, § 8, states in part: "All persons shall be bailable by sufficient sureties, except for capital offenses when proof is evident or presumption great." (Emphasis supplied.) Article VI, § 2, provides in pertinent part: "No person shall be deprived of life ... without due process of law."

In addition to constitutional recognition, capital punishment has received legislative approval. The death penalty has been in effect for most of this state's history. Capital punishment existed from statehood until it was abolished in 1915. *Opinion of the Judges*, 83 S.D. 477, 479, 161 N.W.2d 706, 708 (1968). It was reinstated in 1939 and continued until 1972, when the United States Supreme Court effectively invalidated the then-existing capital sentencing scheme. Reed C. Richards & Stephen C. Hoffman, *Death Among the Shifting Standards: Capital Punishment After Furman*, 26 *SDLRev* 243 (Spring 1981). The legislature reenacted the death penalty in 1979, and it has remained in effect to the present. Richards & Hoffman, *supra*, at 243; 1979 S.D.Sess.L. ch. 160; 1981 S.D.Sess.L. ch. 186. Eleven individuals have been executed in South Dakota. Richards & Hoffman, *supra*, at 243.

State v. Moeller, 1996 S.D. 60, ¶¶ 97- 101, 548 N.W.2d 465, 487. The South Dakota Supreme Court adopted the test set forth in *Gregg v. Georgia*, 428 U.S. 153, 96 S.Ct. 2909 (1976):

Historical and legislative acceptance of the death penalty is significant, but not dispositive. See *State v. Black*, 815 S.W.2d 166, 188 (Tenn.1991). Constitutional analysis is dynamic and evolving; it cannot rest solely on historical underpinnings. We therefore adopt a three-part analytical framework derived from the United States Supreme Court's plurality decision in *Gregg*. To survive constitutional scrutiny, the death penalty: (1) must comport with contemporary standards of decency; (2) must not be excessive in light of the crime committed; and (3) must serve a legitimate penological objective. *Gregg*, 428 U.S. at 173-83, 96 S.Ct. at 2924-30, 49 L.Ed.2d at 874-80.

Moeller, p. 487-488, ¶102. The South Dakota Supreme Court went on to hold that South Dakota's capital punishment was constitutional and met the three part test set forth in *Gregg*.

We conclude that capital punishment meets all three of these requirements. To begin with, the death penalty comports with South Dakotans' contemporary standards of decency. Because the legislative branch is most representative of the views of the people, legislative enactments are one of the most accurate indicators of societal mores. *Gregg*, 428 U.S. at 179-81, 96 S.Ct. at 2928-29, 49 L.Ed.2d at 878-79; *Commonwealth v. Zettlemoyer*, 500 Pa. 16, 454 A.2d 937, 968 (1982), cert. denied, 461 U.S. 970, 103 S.Ct. 2444, 77 L.Ed.2d 1327 (1983); *Black*, 815 S.W.2d at 189; *State v. Campbell*, 103 Wash.2d 1, 691 P.2d 929, 948 (1984), cert. denied, 471 U.S. 1094, 105 S.Ct. 2169, 85 L.Ed.2d 526 (1985). The South Dakota Legislature reenacted the death penalty in 1979, and has made occasional amendments to the statutory scheme since that time. 1979 S.D.Sess.L. ch. 160; 1981 S.D.Sess.L. ch. 186; 1989 S.D.Sess.L. ch. 206; 1992 S.D.Sess.L. ch. 173; 1994 S.D.Sess.L. ch. 178; 1995 S.D.Sess.L. ch. 132. These statutes have remained undisturbed by the electorate, despite the power of the people to vote death penalty proponents out of office or to reject legislative enactments through a referendum election. This public acquiescence is strong evidence that capital punishment reflects the will of the people of South Dakota.

As noted in *Baze*, States have long explored using lethal injection as a manner of assuring humane method of execution. *Baze*, 553 U.S. 35, 42, 128 S.Ct. 1526-1527. At the time *Baze* was decided in 2008, 36 states had adopted lethal injection as the exclusive or primary means of implementing the death penalty. *Id.* It is also the method used by the Federal Government. *Id.* See 18 USC § 3591 *et seq.* (2000 ed. and Supp.V).

In South Dakota, the Supreme Court has found the death penalty to be Constitutional under both the United States Constitution and the South Dakota Constitution. In this Court's opinion, lethal injection is the most humane manner of implementing the death penalty and therefore, it is constitutional under the South Dakota Constitution.

III. CONCLUSION

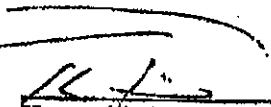
For the reasons set forth above, the Court hereby denies Petitioner's Writ of Habeas in its entirety.

ORDER

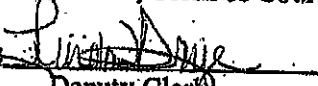
ACCORDINGLY, it is hereby ORDERED that Petitioner's Writ of Habeas Corpus is denied and Respondent shall submit Findings of Fact and Conclusions of Law in accordance with this decision.

Dated this 27 day of February, 2013 at Rapid City, Pennington County, South Dakota.


BY THE COURT


Honorable Thomas L. Trimble
Circuit Judge, Seventh Judicial Circuit

ATTEST: 
Ranae Truman, Clerk of Courts

By: 
Deputy Clerk

(SEAL)

Pennington County, SD
FILED
IN CIRCUIT COURT
FEB 27 2013
Ranae Truman, Clerk of Courts
By:  Deputy

IN THE SUPREME COURT
OF THE
STATE OF SOUTH DAKOTA

SUPREME COURT
STATE OF SOUTH DAKOTA
FILED

JUL 17 2013

Shirley A. Johnson-Ley
Clerk

* * * *

CHARLES RUSSELL RHINES,
Petitioner,

vs.

DOUGLAS WEBER, Warden,
South Dakota State
Penitentiary,
Respondent.

) ORDER DENYING MOTION FOR
) CERTIFICATE OF PROBABLE CAUSE

) #26673
)
)
)
)
)
)

Petitioner having served and filed a motion for a
certificate of probable cause to appeal from a final order entered by
the trial court in the above-entitled habeas corpus proceeding on
April 29, 2013, and respondent having served and filed a response
thereto, and the Court having considered the motion and response and
having determined that probable cause that an appealable issue exists
has not been demonstrated, now, therefore, it is

ORDERED that the motion for a certificate of probable cause
be and it is hereby denied. . .

DATED at Pierre, South Dakota, this 17th day of July, 2013.

BY THE COURT:

David Gilbertson

David Gilbertson, Chief Justice

ATTEST

[Signature]
Clerk of the Supreme Court
(SEAL)

(Justices John K. Konenkamp and Lori S. Wilbur disqualified.)

PARTICIPATING: Chief Justice David Gilbertson and Justices Steven L. Zinter,
Glen A. Severson, Circuit Court Judge Scott F. Myren and
Retired Justice Robert A. Miller.

EXHIBIT

5

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH DAKOTA
WESTERN DIVISION

CHARLES RUSSELL RHINES,

CIV 00-5020-KES

Petitioner,

PETITIONER'S RESPONSE
TO STATE'S MOTION FOR
SUMMARY JUDGMENT

vs.

DARIN YOUNG, Warden,
South Dakota State Penitentiary,

Respondent.

**I. RESPONDENT'S MOTION FOR SUMMARY JUDGMENT DOES NOT
CONFORM WITH LOCAL RULE 56.1A AND SHOULD BE DENIED.**

Respondent has filed a motion for summary judgment pursuant to Federal Rule of Civil Procedure 56. Under Local Rule 56.1A, Respondent was required to submit with its motion "a separate, short, and concise statement of the material facts as to which the moving party contends there is no genuine issue to be tried. Each material fact will be presented in a separate numbered statement with an appropriate citation to the record in the case." Respondent has filed no such statement of allegedly undisputed material facts.

"The purpose of local rule like Local Rule 56.1A 'is to distill to a manageable volume the matters that must be reviewed by a court undertaking to decide whether a genuine issue of fact exists for trial.'" *Sancom, Inc. v. Qwest Communications Corp.*, 2010 WL 299477, *1 (D.S.D. 2010) (unpublished). Thus,



II. "Method of Execution Challenge"

Respondent devotes some fifty pages of his Brief in Support of Respondent's Motion for Summary Judgment to an issue which is not before the Court. (Doc. No. 215, pp. 111-161). As Respondent notes in the "Procedural History" section of Doc. No. 215, after being denied relief on the grounds raised in his initial state habeas corpus petition, Mr. Rhines "filed his petition herein in which he alleged new unexhausted grounds for *habeas corpus* relief in addition to all of the claims he had exhausted in the state courts." (*Id.* at 1-2. *See* Doc. No. 73 (First Amended Petition)). After extended briefing by the parties, the Court entered its Order (Doc. No. 116) denying without prejudice Respondents' motion to dismiss (Doc. No. 77); finding that Grounds Two(A), Three, Four and Ten of the First Amended Petition had been exhausted and would be considered on their merits; finding that Grounds Two(B), Six(E), Nine(B), (H), (I) and (J), Twelve and Thirteen were unexhausted; and staying the petition pending exhausting state court remedies of those claims. (Doc. No. 116 at 9-10). That Order was appealed to the United States Court of Appeals for the Eighth Circuit, which reversed and remanded. *Rhines v. Weber*, 346 F.3d 799 (8th Cir. 2003). The United States Supreme Court granted certiorari "to resolve a split in the Circuits regarding the

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District Court's 'stay-and-abeyance' procedure," *Rhines v. Weber*, 544 U.S. 269, 273 (2005), vacated the Eighth Circuit's judgment and remanded the case to that court to consider whether this Court's grant of a stay constituted an abuse of discretion. *Id.* at 279. The Eighth Circuit remanded the case to this Court to determine whether there was good cause for failure to exhaust the claims in state court, whether any unexhausted claims were plainly meritless and whether Mr. Rhines had engaged in "abusive litigation tactics or intentional delay." *Rhines v. Weber*, 409 F.3d 982 (8th Cir. 2005).

After further briefing and argument by the parties, this Court entered its Order Granting Motion for Stay and Abeyance (Doc. No. 150), finding that Mr. Rhines had good cause for failing to exhaust the claims, that the claims – with the exception of claim Thirteen, which Mr. Rhines subsequently withdrew and dismissed (*see* Doc. No. 152) – were not plainly meritless, and that Mr. Rhines had not engaged in intentionally dilatory litigation tactics. Therefore, the Court stayed the petition for habeas corpus pending exhaustion of Grounds Two(B), Six(E), Nine(B), (H), (I), (J), and Twelve in state court. (Doc. No. 150 at 19).

None of the claims in the original or the First Amended Petition for Writ of Habeas Corpus, exhausted or unexhausted, concerned the manner of execution.

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Therefore the issue of manner of execution, which was included in the latest litigation in the state court, and which was discussed at such length in Respondent's brief, is not before this Court, and this Court cannot issue any sort of judgment concerning that issue.

III. Ground One: Admission of Petitioner's Confession

A. Insufficiency of *Miranda* Warnings.

In Ground One Mr. Rhines contends that his multiple confessions were admitted in violation of the Fifth and Fourteenth Amendments. Specifically Mr. Rhines alleges that law enforcement failed to give adequate warnings pursuant to *Miranda v. Arizona*, 384 U.S. 436 (1966) and its progeny. *Miranda* requires that before a person in custody may be subjected to interrogation,

[h]e must be warned prior to any questioning that he has the right to remain silent, that anything he says can be used against him in a court of law, that he has the right to the presence of an attorney, and that if he cannot afford an attorney one will be appointed for him prior to any questioning if he so desires. Opportunity to exercise these rights must be afforded to him throughout the interrogation.

384 U.S. at 479. After such warning have been given, the individual may waive these rights. *Id.* "But unless and until such warnings and waiver are demonstrated

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AFFIDAVIT OF MARK DERSHWITZ, M.D., Ph.D.

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF WORCESTER

ss:

I, Dr. Mark Dershwitz, of lawful age, being first duly sworn upon oath, state:

1. I have been asked to prepare this expert report by attorneys for the defense in the case of Moeller v Weber. I have previously submitted affidavits in this case on 31 May 2011 and 12 September 2011.
2. I am a medical doctor with a Ph. D. in Pharmacology. A true and accurate copy of my curriculum vitae is attached as Exhibit A. I am licensed to practice medicine in the states of Massachusetts and Maine. I am currently an anesthesiologist at the University of Massachusetts and I am certified by the American Board of Anesthesiology. I am currently Professor of Anesthesiology and Biochemistry & Molecular Pharmacology at the University of Massachusetts.
3. I have done extensive research and written numerous review articles and research papers on the use of anesthetics and I regularly practice medicine in that capacity. My research includes the study of pharmacodynamics and the pharmacokinetics of drugs. Pharmacokinetics is the study of the time course of a drug, while pharmacodynamics refers to the effects of a drug. Prior to my current appointment at the University of Massachusetts, I was an Instructor,



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Assistant Professor and Associate Professor at Harvard Medical School.

4. I have testified as an expert witness concerning the pharmacokinetics and the pharmacodynamics of anesthetic drugs and other medications. I have testified in court as an expert witness on twenty-four occasions. I have given fifty-three depositions as an expert witness. The list of cases in which I have testified is attached as Exhibit B.
5. I have reviewed the protocols for lethal injection used in the states of Arkansas, Alabama, Arizona, California, Delaware, Florida, Georgia, Kentucky, Maryland, Missouri, Montana, North Carolina, Ohio, Oklahoma, South Carolina, South Dakota, Texas Virginia, and Washington and by the federal government. Most of the states (and the federal government) employ similar three-drug protocols for carrying out lethal injection. While the protocols and the jurisdictions differ in terms of the doses and identities of the three medications used, each of these protocols, when implemented as written, will render an inmate unconscious quickly and cause the inmate's rapid and painless death.
6. I have reviewed a document entitled, "ERM A.12(B) Capital Punishment Final Days Procedures," dated 13 October 2011. The document contains instructions for using *either* thiopental or pentobarbital as the first drug, or as the only drug, in the protocol. I have been informed by attorneys for the defense in this case that the State of South Dakota intends to use pentobarbital as the first drug, or as the only drug, in the lethal injection protocol. Exhibit C is a copy of the analysis of the lot of pentobarbital vials that the State of South Dakota intends to use for lethal injection. This analysis demonstrates that the pentobarbital meets the

standards set forth by the United States Pharmacopeial Convention.

7. The document, "BRM A.12(B)" states that medications will be administered as follows in the three-drug protocol:
 - a. Two intravenous catheters will be inserted.
 - b. Syringes 1 and 2, each containing 2.5 grams of pentobarbital in a volume of 50 mL, for a total dose of 5 grams, will be injected.
 - c. Syringe #3 containing 25 mL of saline solution will be injected to flush the intravenous line.
 - d. The warden will confirm that the inmate is unconscious.
 - e. Syringe 4 containing 100 mg of pancuronium bromide in a volume of 50 mL will be injected.
 - f. Syringe #5 containing 25 mL of saline solution will be injected to flush the intravenous line.
 - g. Syringes 6 and 7, each containing 120 mEq of potassium chloride in a volume of 60 mL, for a total dose of 240 mEq, will be injected.
8. It is expected that a 5-gram dose of pentobarbital will cause the inmate's electroencephalogram (EEG or recording of brain waves) to become flat. This is the deepest level of anesthesia that can be measured with the brain monitors available today, and is much deeper than barbiturate coma that is in turn deeper than surgical anesthesia.
9. Pentobarbital is commonly used to produce barbiturate coma in the attempt to decrease the degree of brain damage following head trauma, stroke, and other causes of brain damage. It is also used to prevent brain damage during surgical

procedures in which there will be the planned and deliberate interruption of blood flow to the brain. A typical dosing regimen for the institution and maintenance of barbiturate coma is as follows:

- a. Pentobarbital, 10 mg/kg, (or 800 mg in an average 80-kg adult) is given by intravenous infusion over 30 minutes.
 - b. A continuous infusion of pentobarbital at a rate of 5 mg/kg/hr (or 400 mg/hr in an average 80-kg adult) is given for 3 hr.
 - c. The patient's EEG is monitored for the presence of "burst suppression." The appearance of "burst suppression" on the EEG means that there are *intermittent* periods of electrical inactivity (i.e., flat-line).
 - d. The pentobarbital infusion rate is then adjusted between 1 - 5 mg/kg/hr (or 80 - 400 mg/hr in an average 80-kg adult) to maintain the presence of burst suppression on the EEG.
 - e. Because this dose of pentobarbital results in apnea, i.e., the cessation of breathing, the patient is mechanically ventilated.
10. Using the above regimen in an 80-kg adult, it would take between 11 - 41 hr to achieve the administration of 5,000 mg of pentobarbital. There are two reasons that pentobarbital is not given more rapidly or at a higher dose to induce barbiturate coma. First, the dose regimen described in Paragraph 8 is adequate to induce and maintain burst suppression on the EEG. Second, more rapid administration of pentobarbital causes severe and dangerous decreases in blood pressure that might be fatal to the patient.
11. The use of pentobarbital in barbiturate coma has been part of medical practice

from the mid-1970's until the present day. It is neither a novel nor an archaic medical therapy. I have attached two journal articles, one from 1979 and the other from 2010, as Exhibits D and E, respectively, to demonstrate this point.

12. The end-point of burst suppression on the EEG is a deeper level of general anesthesia than is needed for any surgical procedure. Therefore, since the protocol for lethal injection described in Paragraph 7 describes a dose of pentobarbital far in excess of that used to induce and maintain barbiturate coma, and since this is a depth of anesthesia far greater than that needed for any surgical procedure, once 5,000 mg of pentobarbital have been administered intravenously to an inmate, there is, to a reasonable degree of medical certainty, an exceedingly remote chance that the inmate could experience the effects of the subsequently administered pancuronium bromide or potassium chloride.
13. A dose of 5,000 mg of pentobarbital will cause virtually all persons to stop breathing. In addition, a dose of 5,000 mg of pentobarbital will cause the blood pressure to decrease to such a degree that perfusion of blood to organs will cease or decline such that it is inadequate to sustain life. Thus, although the subsequent administration of pancuronium bromide, a paralytic agent, would have the effect of paralyzing the person and preventing him or her from being able to breathe, virtually every person given 5,000 mg of pentobarbital will have stopped breathing prior to the administration of pancuronium bromide. Thus, even in the absence of the administration of pancuronium bromide and potassium chloride, the administration of 5,000 mg of pentobarbital by itself would cause death in almost everyone.

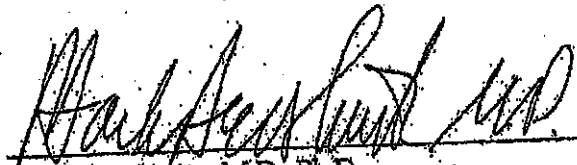
14. Pentobarbital is the most common agent used in the euthanasia of pet cats and dogs by veterinarians. The usual dose is 40 mg/kg. The use of a dose of 5,000 mg in an 80-kg inmate as part of the lethal injection protocol is greater than a 50% increase as compared to the dose used in animal euthanasia.
15. Therefore, it is my opinion to a reasonable degree of medical certainty that there is an exceedingly remote chance that a condemned inmate to whom 5,000 mg of pentobarbital is properly administered pursuant to the lethal injection protocol of the State of South Dakota would experience any pain and suffering associated with the administration of lethal doses of pancuronium bromide and potassium chloride.
16. An inmate sentenced to death in South Dakota may under some circumstances elect the two-drug protocol. The two-drug protocol is identical to the procedure described in Paragraph 7 except that the syringes of potassium chloride are not injected. It is my opinion to a reasonable degree of medical certainty that there is an exceedingly remote chance that a condemned inmate to whom 5,000 mg of pentobarbital is properly administered pursuant to the lethal injection protocol of the State of South Dakota would experience any pain and suffering associated with the administration of a lethal dose of pancuronium bromide.
17. An inmate sentenced to death in South Dakota may under some circumstances elect the one-drug protocol. In this protocol, the inmate is administered a 5-gram dose of pentobarbital alone. It is my opinion to a reasonable degree of medical certainty that there is an exceedingly remote chance that a condemned inmate to whom 5,000 mg of pentobarbital is properly administered pursuant to the lethal

injection protocol of the State of South Dakota would experience any pain and suffering.

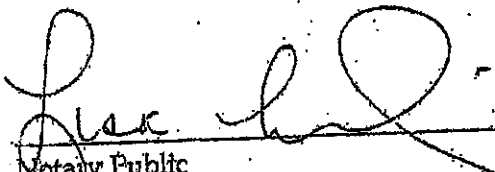
18. I am being compensated at the rate of \$450 per hour.

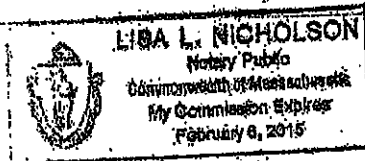
FURTHER AFFIANT SAIETH NOT.

Dated this 9th day of February, 2012.


Mark Dereshwitz, M.D., Ph.D.

Subscribed and sworn to before me this 9th day of February, 2012.


Notary Public



Mark Heath, M.D.

New York, NY

December 1, 2012

Page 1

1 Mark Heath, M.D.

2 STATE OF SOUTH DAKOTA

3 COUNTY OF PENNINGTON

4 IN CIRCUIT COURT

5 SEVENTH JUDICIAL CIRCUIT

6 CIV. 02-924

7 -----

8

9 CHARLES RUSSELL RHINES,

10 Petitioner,

11 vs.

12 DOUGLAS WEBER, Warden, South

13 Dakota State Penitentiary,

14 Respondent.

15 -----

16

17

18 Videotaped Deposition Transcript of

19 MARK HEATH, M.D., in the above-entitled matter, as

20 taken by and before, DEBRA GOODFRIEND, a Certified

21 Shorthand Reporter and Notary Public for the State of

22 New York, held at the offices of Federal Defenders of

23 New York, 52 Duane Street, New York, New York, on

24 December 1, 2012, commencing at 9:45 a.m.

25

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Mark Heath, M.D.

New York, NY

December 1, 2012

Page 2	Page 4
<p>1 Mark Heath, M.D.</p> <p>2 APPEARANCES:</p> <p>3</p> <p>4 FEDERAL PUBLIC DEFENDER DISTRICT</p> <p>5 OF SOUTH DAKOTA AND NORTH DAKOTA</p> <p>6 ATTORNEYS FOR PETITIONER</p> <p>7 101 South Pierre Street, 3rd Floor</p> <p>8 Pierre, South Dakota 57501</p> <p>9 (605)224-0009</p> <p>10 BY: NEIL FULTON, ESQ.</p> <p>11</p> <p>12</p> <p>13</p> <p>14 STATE OF SOUTH DAKOTA</p> <p>15 OFFICE OF ATTORNEY GENERAL</p> <p>16 ATTORNEYS FOR RESPONDENT</p> <p>17 1302 East Highway 14, Suite 1</p> <p>18 Pierre, South Dakota 57501-8501</p> <p>19 BY: PAUL S. SWEDLUND, ESQ.</p> <p>20 (605) 773-3215</p> <p>21 paul.swedlund@state.sd.us</p> <p>22</p> <p>23 ALSO PRESENT:</p> <p>24 Marcelo Rivera, Videographer</p> <p>25</p>	<p>1 Mark Heath, M.D.</p> <p>2 THE VIDEOGRAPHER: This is DVD No. 1</p> <p>3 of the video deposition of Dr. Mark Heath in the</p> <p>4 matter, Rhines vs. Weber. This deposition is being</p> <p>5 held at 52 Duane Street, New York, New York on</p> <p>6 December 1st, 2012 at approximately 9:53 a.m.</p> <p>7 My name is Marcelo Rivera from</p> <p>8 Alderson Court Reporter.</p> <p>9 Will the present counsel please</p> <p>10 introduce themselves, for the record.</p> <p>11 MR. FULTON: Neil Fulton, from the</p> <p>12 Federal Public Defender's office, for the plaintiff.</p> <p>13 MR. SWEDLUND: Paul Swedlund, the</p> <p>14 South Dakota Attorney General's Office, for the</p> <p>15 defendant.</p> <p>16 THE VIDEOGRAPHER: Will the court</p> <p>17 reporter please swear in the witness.</p> <p>18 MARK HEATH, M.D., having been first</p> <p>19 duly sworn by a Notary Public from the State of New</p> <p>20 York was examined and testified as follows:</p> <p>21 DIRECT EXAMINATION BY MR. FULTON:</p> <p>22 Q. Can you start out by telling us your</p> <p>23 name?</p> <p>24 A. My name is Mark Heath.</p> <p>25 Q. And Dr. Heath, I'm going to refer to you</p>
Page 3	Page 5
<p>1 Mark Heath, M.D.</p> <p>2</p> <p>3 INDEX</p> <p>4</p> <p>5 WITNESS PAGE</p> <p>6</p> <p>7 MARK HEATH, M.D.</p> <p>8 By Mr. Fulton 4</p> <p>9 By Mr. Swedlund 63</p> <p>10</p> <p>11</p> <p>12</p> <p>13 EXHIBITS</p> <p>14</p> <p>15 (No Exhibits Marked By Reporter.)</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 Mark Heath, M.D.</p> <p>2 as Dr. Heath today, and not be so informal as to call</p> <p>3 you Mark. Can you tell us how you're employed?</p> <p>4 A. I'm an anesthesiologist. I work at</p> <p>5 Columbia University Medical Center in New York City.</p> <p>6 Q. I want to go back through your education</p> <p>7 just a little bit. Perhaps the easiest way to do is</p> <p>8 that you have in front of you something marked Exhibit</p> <p>9 3. What is that document?</p> <p>10 A. It's my curriculum vitae.</p> <p>11 Q. Can you tell us the highlights of your</p> <p>12 professional education. We don't need to go all the</p> <p>13 way back to high school, but where you did your</p> <p>14 medical education and residency?</p> <p>15 A. I did my medical education at University</p> <p>16 of North Carolina in Chapel Hill. After that I did a</p> <p>17 one-year internship in internal medicine in Washington</p> <p>18 D.C., and then I did an internship in anesthesiology</p> <p>19 at Columbia University Medical Center in New York</p> <p>20 City. I then did a fellowship that was a mixture of</p> <p>21 research and specializing in cardiac anesthesia for</p> <p>22 about a year-and-a-half, again at Columbia. And then</p> <p>23 I joined the faculty of Columbia University as an</p> <p>24 anesthesiologist and a staff member of the hospital.</p> <p>25 Q. When was that, that you joined the</p>

2 (Pages 2 to 5)

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Mark Heath, M.D.

New York, NY

December 1, 2012

Page 18	Page 20
<p>1 Mark Heath, M.D.</p> <p>2 A. Correct.</p> <p>3 Q. So for one way to think about it, you</p> <p>4 could have a contaminant that made the process</p> <p>5 unintendedly painful or improper on the way to death</p> <p>6 or something that happens after an interrupted</p> <p>7 execution?</p> <p>8 A. Right.</p> <p>9 MR. SWEDLUND: Can I ask a question.</p> <p>10 Were you talking about introduction of a contaminant</p> <p>11 at what stage were you talking about?</p> <p>12 Q. Doctor, we're not talking about you</p> <p>13 being the expert on how and when the drugs are</p> <p>14 compounded, correct?</p> <p>15 A. Correct, I think that's correct.</p> <p>16 That's up to you, but yes.</p> <p>17 Q. But you have in your practice</p> <p>18 administered compounded drugs?</p> <p>19 A. I've administered drugs where I've mixed</p> <p>20 the drug myself and I've used drugs that have been</p> <p>21 compounded by the pharmacy at the hospital.</p> <p>22 Q. Okay. And to sort of address Paul's</p> <p>23 question, I mean, you have some understanding of how</p> <p>24 the compounding process works?</p> <p>25 A. Yes.</p>	<p>1 Mark Heath, M.D.</p> <p>2 will be a contaminant introduced, you're just saying</p> <p>3 it's a potential that exists?</p> <p>4 A. Yes.</p> <p>5 Q. And it's a potential that can make the</p> <p>6 execution less humane?</p> <p>7 A. Yes.</p> <p>8 Q. Let's talk, specifically, if we can,</p> <p>9 about the drug pentobarbital. Is that a drug that</p> <p>10 you're familiar with?</p> <p>11 A. Yes.</p> <p>12 Q. Tell us a little bit about what it is?</p> <p>13 A. It's a drug in a class called</p> <p>14 barbiturates or barbiturates. The spelling is the</p> <p>15 same but people pronounce it differently.</p> <p>16 Barbiturates are drugs that when they reach the brain</p> <p>17 cause depression of the brain, and if they're given in</p> <p>18 sufficient dose will cause drowsiness and then</p> <p>19 unconsciousness.</p> <p>20 Q. Is it a drug that you administered in</p> <p>21 your practice?</p> <p>22 A. I have, yes.</p> <p>23 Q. What is it typically used for in</p> <p>24 anesthesiology?</p> <p>25 A. It's not used very often at all in</p>
Page 19	Page 21
<p>1 Mark Heath, M.D.</p> <p>2 Q. Tell us a little bit about points in the</p> <p>3 process where based on your experience you see the</p> <p>4 potential for contaminants potentially to be</p> <p>5 introduced?</p> <p>6 A. Well, it can happen anywhere from the</p> <p>7 assembly of the ingredients for the actual chemical,</p> <p>8 the turning or synthesis that those ingredients into</p> <p>9 the chemical that is going to be the drug, the</p> <p>10 shipping, handling, storage of that chemical, then the</p> <p>11 preparation of that chemical, that chemical which is</p> <p>12 going to be the drug, into the actual package drug</p> <p>13 form, and then the transport of that to the place of</p> <p>14 storage or place of use. Problems can happen during</p> <p>15 storage, after it's removed from storage. Problems</p> <p>16 can happen during the drawing up of the drug into a</p> <p>17 syringe at its point of use. Basically anywhere in</p> <p>18 the full chain from the precursor molecules involved</p> <p>19 in the synthesis of the chemical throughout the</p> <p>20 process of turning that chemical into an actual drug</p> <p>21 and the handling of the drug in preparation for</p> <p>22 administration.</p> <p>23 Q. To be fair in drawing the boundary about</p> <p>24 your opinion, you are not identifying a specific point</p> <p>25 in South Dakota's protocol where you're saying there</p>	<p>1 Mark Heath, M.D.</p> <p>2 anesthesiology. The main use would be in a clinical</p> <p>3 situation where there was a need to greatly reduce the</p> <p>4 activity of the brain because either the brain has</p> <p>5 received trauma or is going to be subjected to injury</p> <p>6 as a result of a surgical procedure.</p> <p>7 Q. In terms of its operation, can you</p> <p>8 compare the speed, the nature in which it operates</p> <p>9 with other barbiturates a little bit?</p> <p>10 A. Yes. Barbiturates are typically divided</p> <p>11 into classes, depending on how rapidly they exert</p> <p>12 their action and for how long they exert their action.</p> <p>13 So the classes, there are different ways that people</p> <p>14 do it, but typically they talk about ultra-short,</p> <p>15 ultra-fast-acting barbiturates, and then short-acting</p> <p>16 barbiturates, and medium-acting barbiturates and</p> <p>17 long-acting barbiturates. And pentobarbital is</p> <p>18 typically put into the short or medium-acting</p> <p>19 categories depending on which author is referring to</p> <p>20 it.</p> <p>21 Q. And being a short or medium-acting</p> <p>22 barbiturate, what does that mean in terms that a</p> <p>23 layperson can understand in terms of its effect on the</p> <p>24 person that's being anesthetized?</p> <p>25 A. I'll just start by comparing ultra-short</p>

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<p>1 Mark Heath, M.D.</p> <p>2 and ultra-fast acting barbiturates which will enter</p> <p>3 the brain very quickly in a matter of tenths of</p> <p>4 seconds, and will also leave the brain very quickly</p> <p>5 and be taken up by other parts of the body, the fat</p> <p>6 areas of the body. By contrast -- and those drugs</p> <p>7 would be the class of drug would be thiopental, for</p> <p>8 example, and another would be a drug called</p> <p>9 methohexital. By contrast, pentobarbital is slower to</p> <p>10 take effect and lasts for longer. So instead of</p> <p>11 wearing off in a matter of a couple of minutes,</p> <p>12 pentobarbital would typically last for hours.</p> <p>13 Q. You have reviewed the protocol and have</p> <p>14 an understanding at least a paper level of how the</p> <p>15 State of South Dakota intends to use pentobarbital as</p> <p>16 a lethal injection drug, yes?</p> <p>17 A. Yes.</p> <p>18 Q. And tell us a little bit based on your</p> <p>19 training and experience how that drug would operate in</p> <p>20 an execution carried forward with no outside problems,</p> <p>21 it goes according to plan, so to speak?</p> <p>22 A. Just to be clear, I've never seen it</p> <p>23 used in an execution, so I'm a little bit speculating.</p> <p>24 But I have read about executions where it's been used.</p> <p>25 and I can speculate based on my knowledge about</p>	<p>1 Mark Heath, M.D.</p> <p>2 activity, but at that point the person would be</p> <p>3 legally dead.</p> <p>4 Q. In our discussion of compounding you</p> <p>5 mentioned the potential for a drug to be less</p> <p>6 efficacious than it should. Now, based on your review</p> <p>7 of the protocol if it -- how would the administration</p> <p>8 of a less than appropriately efficacious amount of</p> <p>9 pentobarbital manifest to result in an inhumane</p> <p>10 execution?</p> <p>11 A. My concern would be that the prisoner</p> <p>12 would be administered a dose that would impair</p> <p>13 respiration or temporarily prevent respiration, but it</p> <p>14 does sub-lethal and did not effectively kill the</p> <p>15 person. And in that instance, which happens in</p> <p>16 barbiturate overdose, when people try to commit</p> <p>17 suicide or accidentally ingest it or ingestion</p> <p>18 barbiturates for illicit recreational purposes, the</p> <p>19 person can spend a period of time breathing</p> <p>20 inadequately or not at all, but it is not such a time</p> <p>21 that they actually die from that. When the drug wears</p> <p>22 off the person can be left with a brain injury or</p> <p>23 brain damage or also injury to other organs in the</p> <p>24 body.</p> <p>25 Q. So you would end up in a situation where</p>
Page 23	Page 25
<p>1 Mark Heath, M.D.</p> <p>2 barbiturates and pentobarbital and human physiology</p> <p>3 and drug interactions in general. If the intended</p> <p>4 dose of pentobarbital were to be successfully</p> <p>5 delivered into the circulation of a person and carried</p> <p>6 to their brain in this dose it would cause complete</p> <p>7 depression of all the brain activity such that there</p> <p>8 would be no electrical activity in the brain</p> <p>9 whatsoever. The electrical activity of the brain</p> <p>10 sustains many important bodily functions, but in</p> <p>11 particular it sustained respiration, the rhythmic</p> <p>12 breathing that we do all the time and when</p> <p>13 pentobarbital or any barbiturate would stop all</p> <p>14 activity in the brain, it without stop what we call</p> <p>15 the respiratory drive. It would stop breathing from</p> <p>16 occurring. When an animal or person doesn't breathe</p> <p>17 then after a period of several minutes the brain</p> <p>18 starts to sustain injury from lack of oxygen and then</p> <p>19 it starts to sustain permanent death of the neurons,</p> <p>20 which are the cells that carry information to the</p> <p>21 brain. At some point after a number of minutes the</p> <p>22 neurons in the brain will be irreversibly damaged</p> <p>23 and/or dead, the condition that we call brain death,</p> <p>24 and that is legally a type of death, a form of death.</p> <p>25 It's possible that the heart might be still sustaining</p>	<p>1 Mark Heath, M.D.</p> <p>2 a person had received too little or not effective</p> <p>3 enough pentobarbital to actually complete the process</p> <p>4 of killing them, but too much to simply anesthetize</p> <p>5 them so they can be simply brought back of the</p> <p>6 anesthetized state?</p> <p>7 A. I'm sorry, can you say that again. Not</p> <p>8 enough --</p> <p>9 Q. You've given too much to them to just</p> <p>10 anesthetize them and not enough to kill them?</p> <p>11 A. You've given them an amount that would --</p> <p>12 be anesthetic, they probably would be unconscious and</p> <p>13 not feel anything. They would be not breathing very</p> <p>14 much, very low amount of respiration. They would be</p> <p>15 in that state for a period of time until the drug wore</p> <p>16 off. And when the drug wore off they would be left</p> <p>17 with brain injury.</p> <p>18 Q. If I can have you look at page 4 of your</p> <p>19 September 13th, 2012 declaration. It's Exhibit 6.</p> <p>20 You mention in paragraph 60, that as a medical</p> <p>21 practitioner, you would be, quote, highly reluctant,</p> <p>22 close quote, to use an anesthetic agent that would be</p> <p>23 handled and compounded in the manner described and</p> <p>24 complicated by the SD DOC.</p> <p>25 When you make that statement I assume</p>

7 (Pages 22 to 25)

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December 1, 2012

<p style="text-align: right;">Page 62</p> <p>1 Mark Heath, M.D. 2 here today, do you hold those to a reasonable degree 3 of medical certainty? 4 A. Yes, I do. 5 Q. And you've had an opportunity to review 6 before today Exhibits 4, 5 and 6 which are your 7 declarations in the Moeller litigation? 8 A. Yes. 9 Q. The opinions expressed in there are also 10 to a reasonable degree of medical certainty? 11 A. The medical opinions are, yes. 12 Q. Although we've not gone through them all 13 today, based on your review you still hold the 14 opinions expressed in Exhibits 4, 5 and 6? 15 A. Yeah. Except when I provided more 16 information and changed it as to the more recent 17 affidavits. 18 MR. FULTON: Doctor, those are the 19 questions I have. Mr. Swedlund is going to have 20 some questions he's going to ask you, too. 21 MR. SWEDLUND: Could we take a break. 22 THE VIDEOGRAPHER: The time is 23 11:19 a.m. and we're going off the record. 24 (There was a break in the 25 proceedings.)</p>	<p style="text-align: right;">Page 64</p> <p>1 Mark Heath, M.D. 2 Q. So I'm going to look at your testimony 3 in a case that you gave, the Evans versus Star case. 4 Do you recall testifying in that case? 5 A. What state is that? 6 Q. That's in Maryland. 7 A. Okay. 8 Q. You were asked; do you disapprove of 9 executions in general. And your answer was; yes. 10 Question: So all manner of executions 11 that have taken place legally in the United States 12 you disapprove of? 13 And you say: The only qualification 14 is that I think there's theoretical exigent 15 circumstances where I think it might be necessary to 16 execute somebody because the alternative would be 17 worse. But putting that theoretical situation 18 aside, yes, it's correct that I at the present time 19 do not approve of affected executions of people. 20 Is that still your position today? 21 A. Yes. 22 Q. Or have you changed it? 23 A. I'm sure it's, it's a fluid thing but I 24 agree with those statements. 25 Q. Again, in the Rivera case, do you recall</p>
<p style="text-align: right;">Page 63</p> <p>1 Mark Heath, M.D. 2 The time is 11:37 a.m. and we're back 3 on the record. 4 EXAMINATION BY MR. SWEDLUND: 5 Q. Doctor, I wanted to cover something with 6 you here that I wasn't entirely clear on. You are 7 opposed to the death penalty; is that correct? 8 A. The way it's being practiced in the 9 United States now, yes. 10 Q. Well, your opposition goes beyond just 11 how it's practiced, you oppose the very idea of the 12 death penalty? 13 A. You know, I don't really think about the 14 extracted idea of the death penalty, just what I see 15 from participating in this litigation and by, when I 16 read about many of the cases I think that society 17 would be better off if we did not do this. 18 Q. So clarify then for me please, doctor: 19 Are you saying that you oppose it only as it is 20 practiced or you have a deeper moral opposition to the 21 death penalty? 22 A. Opposition is the wrong word. I have a 23 lot of concerns about it because I feel that it's hard 24 to know with certainty in all cases that it's really a 25 guilty person on death row.</p>	<p style="text-align: right;">Page 65</p> <p>1 Mark Heath, M.D. 2 testifying in that case? 3 A. You have to tell me what state it was. 4 Q. Ohio. 5 A. I don't specifically recall, but by that 6 name, but I'll accept that. 7 Q. And you were asked: As it currently 8 exists you are against the death penalty in whatever 9 form it exists at this time. 10 Answer: I'm opposed to the carrying 11 out of the death penalty. 12 Question: Then that would be the same 13 no matter how painless it would be? 14 Answer: That's correct. Even if it 15 were done in a completely painless way I'm very 16 uncomfortable with killing a person in any way. 17 That was a statement you made in 18 Rivera. Do you remember that now? 19 A. I don't remember it, but I agree with 20 it. 21 Q. You agree with it? 22 A. Yes. 23 Q. So your misgivings about the death 24 penalty go beyond merely how it is performed you have 25 a moral objection to it, as well?</p>

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<p>1 Mark Heath, M.D.</p> <p>2 A. I'm not sure moral is the right word for</p> <p>3 it. I don't think that as it's currently practiced in</p> <p>4 the U.S. or probably anywhere else in the world,</p> <p>5 although I don't really know about its practice</p> <p>6 elsewhere, I think it's a mistake.</p> <p>7 Q. And you were asked: You never found an</p> <p>8 acceptable lethal injection protocol for human beings?</p> <p>9 And your answer: That's correct.</p> <p>10 Is that still true today?</p> <p>11 A. Yes, South Dakota is better than the</p> <p>12 great majority of other jurisdictions, but it still</p> <p>13 has flaws and they're correctable and they should be</p> <p>14 corrected.</p> <p>15 Q. But you have to this day you have never</p> <p>16 found a lethal injection protocol that you considered</p> <p>17 acceptable?</p> <p>18 A. Not for humans. For veterinary</p> <p>19 euthanasia, yes, but for lethal injection as has been</p> <p>20 carried out for legal proceedings, no.</p> <p>21 Q. Whether your objection to the death</p> <p>22 penalty is moral or merely to the mechanics of it, do</p> <p>23 your opinions about the death penalty in any way color</p> <p>24 your objectivity about your review of protocols?</p> <p>25 A. I do my best to go beyond any bias that</p>	<p>1 Mark Heath, M.D.</p> <p>2 of it in terms of assessing -- of preparing the drugs,</p> <p>3 administering the drugs, setting up the equipment,</p> <p>4 monitoring the effects of the drugs and being able to</p> <p>5 detect and intervene if a problem is occurring, then I</p> <p>6 think they should be held to that standard.</p> <p>7 Q. Because you said in some of your answers</p> <p>8 that, for example, the pusher said I don't mean to use</p> <p>9 those terms to denigrate what he does and I use them</p> <p>10 because they bring clarity to the role that the person</p> <p>11 plays, but in reference to the pusher you stated that</p> <p>12 this person wouldn't have qualifications to be hired</p> <p>13 in a clinical setting. Do you recall saying that?</p> <p>14 A. I don't specifically recall it, but I</p> <p>15 agree with it as you say it now. Do you mean in this</p> <p>16 deposition here or the affidavit?</p> <p>17 Q. Yes.</p> <p>18 A. I agree with the statement.</p> <p>19 Q. Are you aware of case authorities which</p> <p>20 state that a lethal injection is not a medical</p> <p>21 procedure and is not held to those standards?</p> <p>22 A. I think you mean by case authorities</p> <p>23 legal decisions?</p> <p>24 Q. Correct.</p> <p>25 A. Not specifically. I understand the</p>
Page 67	Page 69
<p>1 Mark Heath, M.D.</p> <p>2 I might have but the definition of subconscious bias</p> <p>3 is one can't know when one has one. So I try to</p> <p>4 eliminate conscious bias as much as possible, but I</p> <p>5 can't speak to subconscious bias, because anybody who</p> <p>6 claims they can doesn't understand what that is.</p> <p>7 Q. So some bias may enter into your</p> <p>8 evaluation of a protocol or how it's used?</p> <p>9 A. Yes, subconscious bias certainly could</p> <p>10 be there.</p> <p>11 Q. Doctor, if I understand your position on</p> <p>12 this as well from your previous testimony, it's your</p> <p>13 belief that a surgical standard of care applies to a</p> <p>14 lethal injection proceeding whether it's one drug or</p> <p>15 three drugs?</p> <p>16 A. I wouldn't use the word surgical</p> <p>17 standard of care. Clinical standard of care should</p> <p>18 apply if one wants to have the same reliability as a</p> <p>19 clinical procedure.</p> <p>20 Q. Let me ask it a different way. Do you</p> <p>21 believe that the persons who perform a lethal</p> <p>22 injection should be held in the same standards as</p> <p>23 persons who administer anesthesia in the operating</p> <p>24 room?</p> <p>25 A. Not necessarily. But for the key parts</p>	<p>1 Mark Heath, M.D.</p> <p>2 general framework that you're talking about. I know</p> <p>3 legislatively some states have explicitly carved out</p> <p>4 the activity as being deemed a medical procedure. And</p> <p>5 I believe, although I can't think of any specific</p> <p>6 examples of courts where they do not view it as a</p> <p>7 medical procedure, but it's also my view that whether</p> <p>8 or not something is a medical procedure exists both as</p> <p>9 a legal point of view and also as a medical point of</p> <p>10 view. And this is an example of using medical</p> <p>11 procedures to carry out in ideally or the intention of</p> <p>12 a euthanasia, which is a medical procedure.</p> <p>13 Q. So to the extent the courts have said</p> <p>14 that optimum medical standards do not need to apply in</p> <p>15 a lethal injection setting, you would disagree with</p> <p>16 those opinions?</p> <p>17 A. I'm not sure that courts say that</p> <p>18 optimum medical standards don't need to apply. You</p> <p>19 have to give me a specific example.</p> <p>20 Q. Well, that --</p> <p>21 A. Optimum medical standards don't apply</p> <p>22 anywhere. They don't apply in medicine. It's always</p> <p>23 below optimum in medicine.</p> <p>24 Q. But to the extent that courts have said</p> <p>25 that a lethal injection is not a medical procedure,</p>

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Mark Heath, M.D.

New York, NY

December 1, 2012

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<p>1 Mark Heath, M.D. 2 completely inappropriate to participate in the 3 procedure, as has been evidenced in numerous lethal 4 injection cases around the country. 5 Q. Now, in Baze, the Supreme Court believed 6 that a provision requiring the hiring of a person with 7 one-year professional experience, and let's talk about 8 an EMT since that's what South Dakota has used, so an 9 EMT with one-year professional experience with that 10 provision was adequate. Do you know what South 11 Dakota's protocol provides? 12 A. In terms of professional experience, two 13 years. 14 Q. So South Dakota's protocol requires more 15 experience than the Baze, than the provision approved 16 in Baze? 17 A. Correct. 18 Q. Now, doctor, I would like to have 19 something on the record here. Could you just explain 20 anesthesia and particularly in this context. Let's 21 say someone is given 5 gram dose of pentobarbital. 22 What's the body going to go through, assuming that 23 it's all successfully delivered, what's going to 24 happen to the body? 25 A. The drug will enter the vein let's say</p>	<p>1 Mark Heath, M.D. 2 of the brain as it binds to the neurons it begins to 3 depress the functioning of those cells and depress the 4 electrical activity of the brain and the functioning 5 of the brain. So that's the point where the brain 6 begins to be disrupted and at some point the 7 disruption becomes severe enough that consciousness is 8 not sustained. 9 Q. Once the inmate loses consciousness the 10 inmate no longer feels or is conscious of pain? 11 A. Well, that's not accurate. The person 12 who's been rendered unconscious by a sedative or 13 anesthetic drug, if they're not deeply anesthetized 14 can be aroused by pain just as in an analogous way to 15 how a sleeping person can be, sleeping in a conscious 16 person can be aroused in that state and then 17 experience pain. 18 Q. But that's more in the circumstance of a 19 surgery where you've had a throat dose. I'm talking 20 about a 5 gram dose of pentobarbital here. No one is 21 going to wake up from that, are they? 22 A. Right. I thought we were talking about, 23 you asked me at what point in the process do they lose 24 consciousness. During the process their loss of 25 consciousness is initially minimal. They are not in a</p>
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<p>1 Mark Heath, M.D. 2 in the arm, it has to it is carried by the circulation 3 to the heart. Heart actually has two sides, the right 4 side and the left side. The right side of the heart 5 will pump the blood through the lungs. The drug will 6 thus be pumped through the lungs, and return to the 7 left side of the heart. And then the left side of the 8 heart will pump the blood which now has the drug in it 9 throughout the body, including in the case of 10 pentobarbital, the thing we're interested in is it 11 being carried to the brain. So it will flow in the 12 blood into the vessels in the brain and then it will 13 travel out of the blood vessels across the wall of the 14 blood vessels into the tissue of the brain. It will 15 then bind or stick to molecules on the surface of 16 neurons in the brain, and as a result of that those 17 neurons will stop firing electrical activity. In the 18 cases that are being talked about here, it all goes in 19 and circulates as planned, that will shut down 20 basically all electrical activity or all detectable 21 electrical activity in the brain. 22 Q. Let me jump in here real quick. At what 23 point does the inmate lose consciousness? 24 A. In the sequence that I gave, it's as the 25 drug is passing from the blood vessels into the tissue</p>	<p>1 Mark Heath, M.D. 2 state of deep unconsciousness where they're 3 unarousable. They're initially in a state of light 4 unconsciousness where they can still be aroused. As 5 the drug's concentration of the brain tissue increases 6 their level of unconsciousness will get deeper and 7 deeper and by that I mean will become increasingly 8 difficult to arouse and then impossible to arouse. 9 Q. So certainly by the time that 10 respiratory arrest takes place the inmate is in an 11 anesthetic state of or surgical plane of anesthesia 12 and no longer capable of being in pain or being 13 consciously aware of being in pain? 14 A. I don't want to quibble about the 15 language because you said at the point respiratory 16 arrest occurs - what we see with pentobarbital is 17 change in respiration. And then you don't know what 18 the last breath is until some period of time after it 19 is taken. So if you want to call respiratory arrest 20 something where say 60 seconds to the time they're not 21 breathing and we'll call that respiratory arrest, 22 then I'll agree with that, in this context. Right at 23 the time where they're taking halting breaths or 24 yawning or snoring, we don't know that's respiratory 25 arrest until after the fact. When they are in that</p>

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Mark Heath, M.D.

December 1, 2012

New York, NY

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<p>1 Mark Heath, M.D.</p> <p>2 anesthesiologist, for example, very few are able to do</p> <p>3 administering drugs and detect assessing levels of</p> <p>4 sedation and unconsciousness. And if they're properly</p> <p>5 positioned, they'll be able to know if things are done</p> <p>6 wrong.</p> <p>7 Q. How about an EMT?</p> <p>8 A. Again, we had EMT's in general typically</p> <p>9 are not specialized and experienced in assessing</p> <p>10 levels of sedation from anesthetic drugs, but it is an</p> <p>11 activity that they sometimes confront because</p> <p>12 sometimes they are called to a situation where a</p> <p>13 person has taken an overdose of drugs or alcohol.</p> <p>14 Q. Well, the -- in the lethal injection</p> <p>15 setting, is the necessity of experience measuring</p> <p>16 anesthetic depth very important when you're only using</p> <p>17 a one-drug pentobarbital protocol?</p> <p>18 A. You don't have to call it anesthetic</p> <p>19 depth, but being able to assess the level of</p> <p>20 intoxication, the level of sedation, the level of</p> <p>21 impairment of the nervous system functioning, yes,</p> <p>22 that's important.</p> <p>23 Q. Why is that important if the inmate has</p> <p>24 stopped breathing within 60 seconds, why is it</p> <p>25 important for the EMT to have any further experience</p>	<p>1 Mark Heath, M.D.</p> <p>2 wrong with the drug itself or the administration of</p> <p>3 the drug that something was not going right if as we</p> <p>4 discussed if 5 grams didn't lead to comatose state</p> <p>5 with no breathing, did not lead to death, then</p> <p>6 something is wrong in the process somewhere.</p> <p>7 Q. So if the first round didn't take it</p> <p>8 might be because there was infiltration and not an</p> <p>9 inadequate dose --</p> <p>10 A. It could be --</p> <p>11 Q. Just answer the question I asked. That</p> <p>12 might be one reason that the drug didn't work because</p> <p>13 it infiltrated --</p> <p>14 A. Circulation, yes.</p> <p>15 Q. And another reason might be because the</p> <p>16 drug wasn't sufficiently potent?</p> <p>17 A. Correct.</p> <p>18 Q. Any other reason?</p> <p>19 A. The tubing leaked somewhere, so it's not</p> <p>20 on the tissue, it's on the floor.</p> <p>21 Q. But people are going to see if there's a</p> <p>22 puddle of medication on the floor, right?</p> <p>23 A. I don't know. They might miss it. I</p> <p>24 don't know if it's leaking from right at the hub and</p> <p>25 going down the side of the wrist and onto the gurney</p>
Page 87	Page 89
<p>1 Mark Heath, M.D.</p> <p>2 with measuring anesthetic depth?</p> <p>3 A. If in fact they have stopped breathing</p> <p>4 within 60 seconds then you're right there would not be</p> <p>5 a need for that in the case of the single-drug</p> <p>6 protocol using a barbiturate.</p> <p>7 Q. But if they haven't stopped breathing --</p> <p>8 A. You have to understand that shallow</p> <p>9 breathing can be missed by a person who is</p> <p>10 inexperienced. So this is sometimes a problem even in</p> <p>11 veterinary euthanasia, with inexperienced</p> <p>12 practitioners that they fail to recognize failed</p> <p>13 euthanasia procedure.</p> <p>14 Q. If the procedure fails, what do you do?</p> <p>15 A. If the procedure is in the process of</p> <p>16 failing, in other words, I presume you mean by that</p> <p>17 the prisoner is not dead, the procedure calls for</p> <p>18 more, for one more round of pentobarbital to be given.</p> <p>19 Q. Right. You just give more drug until it</p> <p>20 takes, correct?</p> <p>21 A. Not until it takes. They have set for</p> <p>22 one more round of drug and there's nothing specified</p> <p>23 for after that. And I think it would, everybody would</p> <p>24 agree if the first round hadn't worked then I would</p> <p>25 have to be very concerned that there was something</p>	<p>1 Mark Heath, M.D.</p> <p>2 then you might not see it.</p> <p>3 Q. So those are the three possibilities for</p> <p>4 why the inmate might not expire as quickly as you</p> <p>5 would expect. It could be because there's leakage,</p> <p>6 there is a sub-potent drug or infiltration?</p> <p>7 A. We're talking about things going wrong.</p> <p>8 They didn't inject the dose, they decided to take half</p> <p>9 of it home and have fun with it. Or the powder that</p> <p>10 was, they thought they were mixing was, or the</p> <p>11 solution they thought they had was pentobarbital could</p> <p>12 be substituted by someone who wanted to take it home</p> <p>13 and have fun with it. There are a variety of ways</p> <p>14 that fix what one is actually doing.</p> <p>15 Q. But in terms of the adequacy of the</p> <p>16 protocol, doctor, that's what we're talking about</p> <p>17 here, the protection afforded by first of all the</p> <p>18 presumption that people are going to do their jobs,</p> <p>19 and the amount of drug that is called for in the</p> <p>20 protocol, namely 5 grams, those protections would</p> <p>21 provide reasonable assurance that the individual would</p> <p>22 be executed by a humane and painless process, would</p> <p>23 you agree?</p> <p>24 A. Pretty broad question with a lot of</p> <p>25 compounds, but I certainly agree if the protocol is</p>

23 (Pages 86 to 89)

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

Page 1

VERNON EVANS, JR.,
Plaintiff

v.

MARY ANN SAAR, Secretary, Department:
of Public Safety and Correctional
Services, FRANK C. SIZER, JR.,
Commissioner, Maryland Division of
Correction, LEHRMAN DOTSON, Warden,
Maryland Correctional Adjustment
Center, GARY HORNBAKER, Warden,
Metropolitan Transition Center and,
JOHN DOES,
Defendants

: CIVIL ACTION NO.
: L-06-149

* * *
August 29, 2006
* * *

ORAL DEPOSITION of MARK HEATH, M.D., taken
pursuant to notice, held at the Law Offices of
Wilmer, Cutler, Pickering, Hale & Dorr, LLP, 399 Park
Avenue, New York, New York, commencing at 11:27 a.m.,
before Renee Schumann, Court Reporter - Commissioner
of Deeds there being present:

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1 Q. Let me ask you this, do you agree with
 2 that or not?
 3 A. I would need to see the context in
 4 which it was said. The definition of death is --
 5 there are many operating definitions of death, and so
 6 for it -- I agree that it would -- If three grams of
 7 Thiopental were effectively delivered into the
 8 circulation it would kill the person. Would they be
 9 dead in 60 seconds, I, in just a general proposition,
 10 disagree with that, but I need to see the context of
 11 how the language was phrased.
 12 Q. Okay.
 13 A. If he didn't do anything to resuscitate
 14 them, they would with certainty die. It's a lethal
 15 dose of Thiopental. In terms of when they are dead,
 16 I think 60 seconds is on the early side for the
 17 majority of human beings.
 18 Q. Well, you've seen Dr. Dershwitz's
 19 report; haven't you?
 20 A. Yes.
 21 Q. And Dr. Dershwitz says that there's a

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1 would certainly cause death in 60 seconds in
 2 everybody.
 3 BY MS. MULLALLY:
 4 Q. Do you think it would take a little
 5 longer perhaps in some people?
 6 A. I'm sure that it does take longer in
 7 many -- in most people.
 8 Q. All right. Now, you don't mention in
 9 your report at all titration of any of the drugs?
 10 A. I think that's right, yes.
 11 Q. Do you think titration is at all
 12 relevant in lethal injection since the goal is to
 13 execute the individual?
 14 A. Could you define what you mean by
 15 titration?
 16 Q. Changing or selecting an amount of a
 17 drug given based on an individual's sex, height,
 18 weight, age, things like that?
 19 A. It's slightly complicated. If you want
 20 to get every prisoner the identical safety margin
 21 then you would need to factor in those types of

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1 good possibility that an individual who is given
 2 three grams of Thiopental could be -- could be dead
 3 within 60 seconds?
 4 MS. GERAGHTY: And again, I am going to
 5 object to you asking him questions about --
 6 THE WITNESS: I don't recall him
 7 specifically saying that in his report, but I
 8 think that's similar to what I'm saying, in
 9 some people it could stop their heart
 10 basically as soon as it's perfused with the
 11 muscle of the heart, which depending on the
 12 rate of injection, all that kind of stuff,
 13 could be 60 seconds.
 14 But I also think that in many -- and I
 15 had said it before getting evidence, before
 16 actually seeing EKG records and stuff like
 17 that, I could have gone along with that
 18 statement, but now I've seen evidence that
 19 doesn't -- would not normally be available or
 20 isn't available to other people that leads me
 21 to disagree with a sweeping statement that it

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1 things that you mentioned. If you don't care about
 2 doing that, it is, in my opinion, reasonable to give
 3 a dose that if it's effectively delivered will ensure
 4 a surgical pint of anesthesia in everybody.
 5 By not titrating what happens is if
 6 something occurs, if not all of the dose goes in,
 7 then you put some groups at more risk than others.
 8 Q. Now, do you believe that the injection
 9 of the potassium chloride stops the heart and kills
 10 an inmate in a lethal injection situation; is that
 11 correct?
 12 A. In the great majority of executions
 13 that is what actually stops the heart, it's the
 14 potassium.
 15 Q. And why do you believe that?
 16 A. From reviewing EKG records and in
 17 conjunction with witness descriptions and logs hard
 18 data, the best data that we have from executions,
 19 which again, is not collected in my opinion in a good
 20 scientific fashion, but it's the best we have and
 21 it's pretty good.

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19 (Pages 70 to 73)

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Westlaw

2009 WL 6686346 (S.D. Ohio)

Page 1

For Opinion See 2011 WL 2681193, 2011 WL 320166, 2010 WL 3769213, 2010 WL 3238972, 2010 WL 3212079, 2010 WL 1882263, 2010 WL 1610608, 2010 WL 1434312, 2009 WL 4842393, 610 F.Supp.2d 853, 72 Fed.R.Serv.3d 161, 2008 WL 4411391, 2008 WL 4411393, 2008 WL 4411395, 2008 WL 4065811, 2008 WL 4065812, 2008 WL 4065808, 2008 WL 4065809, 2008 WL 4065813, 2008 WL 4065815, 2008 WL 4065826, 2008 WL 4065828, 2008 WL 4065830, 2008 WL 4065832, 2008 WL 4065833, 2008 WL 4065836, 2008 WL 4065838, 2008 WL 4065841, 2008 WL 4065842, 2008 WL 4065844, 2008 WL 4065862, 2008 WL 4065876, 2008 WL 471536, 2007 WL 2688249, 2007 WL 2607583, 2007 WL 1831115, 2007 WL 1202718, 2007 WL 582486, 2007 WL 582490, 2006 WL 3762133, 2006 WL 3526424, 2006 WL 3391001, 2006 WL 3793308, 2006 WL 3043116, 2006 WL 2709775, 2006 WL 1705177, 430 F.Supp.2d 702, 2005 WL 5253337

United States District Court, S.D. Ohio,
Eastern Division.
COOEY,

v.
STRICKLAND, et al.
No. 2:04-CV-1156,
March 26, 2009.

Testimony of Mark Heath, M.D.

Case Type: Civil Rights & Constitutional Law >>
Section 1983
Jurisdiction: S.D. Ohio
Name of Expert: Mark J. S. Heath, M.D.
Area of Expertise: Health Care-Physicians &
Health Professionals >>>Anesthesiologist
Representing: Plaintiff

Appearances of Counsel:

For the Plaintiff: Timothy F. Sweeney, Esquire
John P. Parker, Esquire.

For the Defendant: Charles L. Wille, Esquire.

Before the Honorable Gregory L. Frost United
States District Judge.

COLUMBUS, OHIO

(VOLUME I)

EXCERPT OF TRANSCRIPT OF PROCEEDINGS

Denise N. Errett, RMR, CRR

Official Court Reporter

85 Marconi Boulevard

Room 260

Columbus, Ohio 43215

(614) 719-3029.

TABLE

THE COURT: All right. Mr. Sweeney, you may be-
gin your direct examination.

MARK HEATH, M.D. AFTER HAVING BEEN
FIRST DULY SWORN, TESTIFIED AS FOL-
LOWS:

DIRECT EXAMINATION

BY MR. SWEENEY:

Q. Good afternoon, Doctor. Please state your name.

A. Mark Heath.

Q. What do you do for a living?

A. I'm an anesthesiologist.

Q. And where at?

A. In New York City, at Columbia University.

Q. Tell the Court, if you would, about your -- you

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Q. That kind of transparency, do you see that in other states, at least some transparency where you can review the process to know whether the execution was, you know, what -- medically at least make some judgment as to whether it was humane or not?

A. Well, there are states where I believe there is a conscientious physician assessing anesthetic depth throughout. That doesn't prove that they're not deliberately misleading, but I am willing -- you know, I fully accept that a conscientious physician is going to be doing their job and ensuring that the prisoner is anesthetized.

Is it a total guarantee? No. There are no guarantees in life on anything, but I think it certainly meets any reasonable standard.

Q. The issue of transparency, though. And what are the things you, as a physician, would need to know or want to know so that you can make a judgment as to -- reliable judgment within the scope of, you know, reasonable human endeavor as to whether or not an execution is being carried out in a way that's humane, a person is not suffering pain from it?

A. You're talking about a hypothetical. If I were to review an execution record and there was an EKG tracing showing that the heart rate hadn't gone up and blood pressure is showing that it had not gone up -- it probably would have gone way down if the thiopental got in -- and a person who understood how to assess anesthetic depth had been observing the procedure, then I would be comfortable that -- even though the prisoner was paralyzed, I would be pretty comfortable that they had had a humane execution. I can look at an anesthesia record and could be pretty comfortable that the patient was properly asleep, or see that they weren't asleep.

It's much more difficult with pancuronium. If you really want transparency, you should do it like the veterinarians do it, where they don't use a paralyzing drug. If the dog or the cat is in pain or suffering, it will struggle or bark or move in some way, and the owner of the pet will see that. The veteri-

arian will see that and will fix it. That's why veterinarians don't use pancuronium. That's why, in Ohio, animal shelters aren't allowed to use paralyzing drugs. It's because they don't want to mask that problem.

Q. It's your understanding that that restriction on veterinarians, is that a statutory one, or do you know?

A. I know animal shelters in Ohio are only allowed to use pentobarbital, which is -- you can think of pentobarbital like Pentothal, except that, instead of wearing off quickly, it lasts for a very, very long time, which makes sense. You want the animal to be dead. So it makes sense to use something long-acting. They're not -- animal shelters don't use anything other than that. At least they're not supposed to in Ohio.

Q. Could the use of one drug, such as in the euthanasia context involving animals, could that, in your opinion, be effectively used in an execution setting?

A. What works for all other vertebrate animals, all other mammals, is going to, in massive overdoses, is going to work in human beings also.

Q. Do you have any sense as a medical professional as to how long an execution would take using massive doses of sodium thiopental?

A. Which would be the same as using massive doses of some other anesthetic. Yeah.

Q. True.

A. The reason one would die in that context is going to be because of not breathing. The drug will take away the respiratory drive. And in a healthy person, I think that would take probably around ten minutes. It's very variable. You will have severe brain injury and brain death after around four minutes. And, so, a person could be considered brain dead before their heart actually stops working because their brain would have -- all the neurons in

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their brain would have died irreparably, and that's brain death. And that's legal death, also. It will take longer, probably, for the heart to stop having electrical activity.

Q. Christopher Newton's execution, it appeared, took what, according to that chart, anyway, based on the timeline? Do you see that? I think it's the last column.

A. I think it's 14 minutes.

Q. In your opinion, would the use of one drug, massive dose of sodium thiopental or some other barbiturate, take more or less time than that?

A. If you -- you know, if you give a massive dose of pentobarbital, which can be done very quickly, in all likelihood the person is going to be legally dead in less time than that.

THE COURT: Well, you keep changing. He keeps talking about sodium thiopental, and you keep saying -- I guess -- excuse me -- what I'm reading from you is that you would suggest going to that other drug?

THE WITNESS: I'm uncomfortable suggesting things, as a physician, proactively designing a protocol, because professional ethics --

THE COURT: What do you think you're doing here?

THE WITNESS: Well, I'm trying to -- that's a very good question, and it's difficult. I am trying to, you know, say what I think the main problems are, but in terms of giving specific recipes, I will -- in terms of the difference between pentobarbital and thiopental that you're asking about --

THE COURT: That's right.

THE WITNESS: -- thiopental is given in large volumes, and so it takes a long time. It can take longer to get it in. One can give a comparable or a larger dose of pentobarbital more quickly. So that

affects how the timing would unfold.

BY MR. SWEENEY:

Q. With the dose, massive dose, of whichever drug, sodium thiopental, pentobarbital, whichever one is used, if that is used in place of a three-drug protocol, in your opinion, the I.V.-access issues and infiltration issues, are those problems any longer?

A. If all you're using is an anesthetic-only technique, which is what veterinarians use --

Q. Right.

A. -- the chance of causing an inhumane death is exceedingly remote. Again, you're using a drug that all it does is make you get sleepy and then make you go to sleep and then make you stop breathing and make you die. The worst that could happen is you don't get enough in right away, which is what happened to Mr. Clark, or whatever, and you give more, and you give more until the person does get sleepy and until they do die. That's really the worst thing that can happen.

Without -- if you remove the drugs that can cause excruciating pain, there's no way of having excruciating pain, or any pain. You still have to worry about getting the I.V. in. You know, what happened to Mr. Clark should never have happened, that his neck was being needled, especially when he was sitting up. You have to worry about those things also, but in terms of the drugs that you use, if you just use a massive overdose of an anesthetic, it will stop the breathing, and it will cause death, and it will not be able to cause pain, because all anesthetics do is make you go to sleep.

Q. The pancuronium, does it perform any medical function at all in an execution?

A. No medical function whatsoever.

Q. Back to the protocol. I want to wrap that up. Does the Ohio protocol address the contingency for what to do in the event peripheral I.V. access is un-

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Q. But you mentioned toxicology, Doctor. In fact, didn't you say in your deposition that the toxicological reports that you have examined indicates that in most circumstances an adequate dosage of thiopental was administered? Did you not say that?

A. In other states, yes, in the states where I'm able to look. So, again, many states, you can't use the numbers. But in the states where I can use the numbers, most of the time they are.

Q. And didn't you say in your deposition, in fact, that you spoke to a laboratory technician or a laboratory director in North Carolina, and he indicated to you that the samples, the toxicological reports from those samples taken, the samples on which those reports were based, were improperly drawn and couldn't be used to do scientific conclusions?

A. That's not exactly what he said. That's why I don't use numbers from North Carolina to draw robust conclusions.

Q. And you are aware, Doctor, that this court, in previously granting a preliminary injunction, thought that the North Carolina possible evidence of improper thiopental was a significant piece of information, which it was at the time? Are you aware of that?

A. I've been told by attorneys that that was one of the issues you had raised. And I think I saw it in a motion to dismiss or some such motion that you wrote, and that's exactly why I did my very best, both before and after the publication, to try to express the concern that I have about those numbers.

Q. Isn't it true, Doctor, that you're opposed to the death penalty? That's true, isn't it?

A. Yes.

Q. And isn't it true that, because you're opposed to the death penalty, you don't really need any substantial evidence that inmates suffered severe pain in order to testify or render an expert opinion that there's a risk that they could?

A. That's completely untrue. Again, if Ohio were to use a veterinary standard of lethal injection or to bring in a experienced professional who could ensure anesthetic depth when the prisoners are paralyzed and being given potassium, then there would be no litigation, on at least I would not participate in the litigation, or I would work for your side to say that I think this is a safe and humane procedure.

Q. Isn't it true, Doctor --

THE COURT: They can't afford you.

THE WITNESS: Dr. Dershwitz charges more. So --

MR. WILLE: Thank you, Your Honor. I have no more questions.

THE COURT: Thank you. Actually, it doesn't matter. It's all fungible, I think.

MR. SWEENEY: One question?

THE COURT: Yeah. You said one.

MR. SWEENEY: I think it will be one.

REDIRECT EXAMINATION

BY MR. SWEENEY:

Q. You were about to describe three factors you use to assess substantial risk. Explain to the judge your three factors and how you apply it.

THE COURT: Yeah. That's never been testified to.

MR. SWEENEY: I don't think it has.

THE COURT: No, it has not. No. I said it has not been testified to, but it was brought up on cross.

BY MR. SWEENEY:

Q. Could you go ahead and explain the three factors?

THE COURT: The asteroid hitting the foot, apparently, something going on there. I haven't quite

In The Matter Of:
RONALD ALLEN SMITH, et al. v.
STATE OF MONTANA, et al.

MARK J.S. HEATH, M.D.
April 28, 2015

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MONTANA FIRST JUDICIAL DISTRICT COURT
LEWIS AND CLARK COUNTY

 RONALD ALLEN SMITH AND) Cause No.
 WILLIAM J. GOLLEHON,) BDV 2008-303
)
) Plaintiffs,
)
) v.
)
) STATE OF MONTANA;
) DEPARTMENT OF CORRECTIONS;
) DIRECTOR MIKE BATISTA;
) WARDEN LEROY KIRKEGARD;
) JOHN DOES 1-20,
)
) Defendants.

April 28, 2015
6:00 p.m.

TELEPHONIC DEPOSITION of the
 EXPERT WITNESS, MARK J.S. HEATH, M.D.,
 held at 67 Riverside Drive, New York,
 New York, before Cynthia Zoller, R.P.R.,
 a Notary Public within and for the
 State of New York.

* * *

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1 - Mark J.S. Heath, M.D. -

2 M A R K J . S . H E A T H , M . D . ,

3 Expert Witness herein, having affirmed
4 before Cynthia Zoller, R.P.R., a Notary
5 Public within and for the State of New York,
6 was examined and testified as follows:

7 THE REPORTER: Please
8 state your name for the record.

9 THE WITNESS: Mark J.S.
10 Heath, M.D.

11 THE REPORTER: Please
12 state your address for the record.

13 THE WITNESS: The office
14 address is 630 West 168th Street,
15 Department of Anesthesiology,
16 Columbia University, New York,
17 New York 10032.

18 MS. COLLINS: For the
19 record, my name is Pamela Collins.
20 I'm an Assistant Attorney General
21 for the State of Montana,
22 representing the defendants.

23 MR. WATERMAN: My name is
24 Ron Waterman. I'm the attorney in
25 Helena, Montana representing the

1 - Mark J.S. Heath, M.D. -
2 that typically happens, and maybe this
3 paragraph comes from an introductory
4 chapter, I'm not sure.

5 Q Okay. If you'll take a look at
6 the last sentence of that paragraph at the
7 top of the Exhibit 1, it states that,
8 "Lastly, the author believes in the
9 importance of disclosing that, as a result
10 of his involvement in the legal challenges
11 to lethal injection, he has developed a
12 strong opposition to the imposition of the
13 death penalty as it is presently
14 administered in the United States."

15 Did I read that sentence
16 accurately?

17 A I think so, yes.

18 Q Is that a true statement in terms
19 of you, as far as you are concerned?

20 A It's a lot more complicated than
21 that, but then it can then be distilled into
22 one sentence and it also reflects my views,
23 this looks like it was written in 2007, so
24 those were my views eight years ago,
25 approximately.

1 - Mark J.S. Heath, M.D. -

2 patients it might be reduced as low as 100
3 milligrams and for some patients it might go
4 up to 400 milligrams, in sometimes more
5 large and more resistant patients, 400 or
6 more.

7 Q And Dr. Heath, for the thiopental
8 how long did it take for, how long was the
9 time of the onset of action for thiopental
10 when you used it in your work as an
11 anesthesiologist?

12 A To break it down, the amount of
13 time that elapses between the injection and
14 the first evidence that it's taking effect
15 in the brain is quite variable. It depends
16 on the speed or the rate of the patient's
17 circulation, among other things so an
18 average patient might be in the realm of 20
19 seconds, 20 to 30 seconds; a patient with a
20 slower circulation because of heart failure
21 or some other problem could be well over a
22 minute and again that's the time it takes
23 for the drug to reach the brain and
24 obviously, it's not exerting any effects on
25 the brain until it reaches the brain so

1 - Mark J.S. Heath, M.D. -

2 that is below the dose needed to exert the
3 desired effect, in this instance would be
4 unconsciousness, then the rate at which one
5 moves towards unconsciousness will be lower
6 and one will never achieve it.

7 If one gives a dose higher than,
8 as with most drugs, the more one gives, the
9 more rapidly one sees the effects.

10 Q And you say this is true of all
11 barbiturates or all drugs in general or,
12 or --

13 A Well, maybe not of all drugs,
14 because some drugs you don't see the effects
15 for days or longer so the speed with which
16 you give it, whether you give it one minute
17 or five minutes or the dose which you give
18 it will still leave it, will still make it
19 that it only starts to work in several days
20 and perhaps, one wouldn't notice a
21 difference, but I think, let's confine this
22 to what we are talking about, thiopental,
23 which is trying to induce unconsciousness.
24 I think it's fair to say I can't think of an
25 exception right now, that all drugs that are

1 - Mark J.S. Heath, M.D. -

2 used to produce sedation and unconsciousness
3 will exert their effects at a more rapid
4 rate if you give more and to clarify again,
5 giving more will not have a substantial or
6 any material effect on how long it takes for
7 the drug to travel from the point of
8 injection to the brain.

9 What I'm talking about is the
10 onset and that transition from being fully
11 conscious to being fully unconscious.

12 Q Dr. Heath, if you'll take a look
13 at State's Exhibit 2.

14 A Yes.

15 Q This is a five-page document dated
16 April 30th, 2013, which begins with the
17 words, "I, Dr. Mark Heath, hereby declare as
18 follows:" Do you recognize this document?

19 A Yes.

20 Q And is that your signature on the
21 last page of the Exhibit 2?

22 A Yes, it is.

23 Q Dr. Heath, looking at Paragraph 10
24 in Exhibit 2, in the second sentence you
25 state: "Pentobarbital has a slower onset

1 - Mark J.S. Heath, M.D. -

2 Q You state in that state -- in that
3 sentence in your declaration that I just
4 read, "in many instances, prisoners display
5 a more prolonged period of movement after
6 the drug starts to take effect" and you are
7 referring to pentobarbital versus
8 thiopental. How many instances are you
9 referring to there?

10 A I need to be approximate and say
11 several tens; 10, 20, 30, I don't know.
12 It's the typical description from a
13 pentobarbital execution that the prisoner
14 breathed for a longer period of time, may
15 have uttered some words that may or may not
16 have been coherent, may have moved their
17 body in a variety of ways and those things
18 are extremely uncommon in thiopental
19 executions and I should just give one
20 exception; there are some states that give
21 the thiopental very, very slowly over a
22 period of many minutes and in those cases as
23 one would expect, that onset transition is a
24 lot slower, but that's not because the drug
25 is, because of the aspect of the drug, it's

1 - Mark J.S. Heath, M.D. -
2 to and another one was not and I don't
3 recall which one I looked at, to be honest.

4 Q Could you tell me what the time of
5 onset of action would be when 3 grams of
6 thiopental is properly administered
7 intravenously?

8 A At what rate?

9 Q Could you give me a range
10 depending on the rate?

11 A At a very slow rate it would take
12 hours. At its fastest possible
13 administration, it would take some tens of
14 seconds to transition from full
15 consciousness to full and deep
16 unconsciousness.

17 Q And I'm sorry, what -- I'm getting
18 mix up with tens or tenths.

19 A Tens. I'm sorry, there are no
20 tenths in this discussion.

21 Q So it's tens?

22 A Tens, yes.

23 Q So tens of seconds?

24 A Yes. And I just have to be clear,
25 I've not had the opportunity to be

1 - Mark J.S. Heath, M.D. -

2 time, but does not die because the drug
3 hasn't been fully, hasn't been delivered
4 into the circulation, just into the tissue,
5 and emerges with brain damage, which would
6 be an inhumane and disastrous outcome.

7 That is less likely to happen if
8 thiopental or another ultrashort acting drug
9 is used, because in that circumstance, the
10 prisoner will not attain a high enough level
11 in their blood to render them unconscious
12 and make them stop breathing and sustain
13 brain damage so again the concern centers on
14 the executions which inevitably occur where
15 the drug or drugs are not delivered into the
16 venous system and into the circulation, but
17 instead, are infiltrated into the tissues
18 surrounding the IV catheter.

19 Q But Doctor, assuming proper
20 administrations of the drugs, what would be
21 your response?

22 A If proper administration of the
23 drug occurs, whether it is thiopental or
24 pentobarbital, if proper administration
25 occurs in the intended multi-gram dose into

1 - Mark J.S. Heath, M.D. -
2 the circulation and carried to the brain,
3 then there's no difference between the
4 drugs, because they will both produce deep
5 unconsciousness that will outlast the
6 duration of the execution.

7 The problem centers around the
8 inevitable occurrence of improper or failed
9 administration.

10 Q Doctor, what is the dividing line
11 between the classification of ultrafast
12 barbiturates and fast barbiturates; is it a
13 time dividing line or where do we draw the
14 line between those two or where do medical
15 people draw the line between those two?

16 A Well, the line is really a
17 molecular line. The molecules that have
18 been modified to have this property of very
19 rapidly crossing membranes is a discreet
20 group from the rest of the barbiturates,
21 because they don't have that modification or
22 those modifications. Those modifications
23 have created a class unto itself, this ultra
24 class, which is not surpassed or exceeded in
25 that property of rapidly crossing a membrane

UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH DAKOTA
SOUTHERN DIVISION

DONALD E. MOELLER,

Civ. 04-4200

Petitioner;

v.

AFFIDAVIT OF
WARDEN DOUGLAS WEBER

DOUGLAS WEBER, Warden, South
Dakota State Penitentiary,

Respondent.

State of South Dakota)
County of Minnehaha) ss.

I, Douglas Weber, being first duly sworn upon oath, testify, based on personal knowledge and belief, as follows:

1. I was appointed to serve as Warden of the South Dakota State Penitentiary program (hereinafter SDSP), located in Sioux Falls, South Dakota, on November 19, 1996, by then Secretary of Corrections, Jeff Bloomberg. In my capacity as Warden, I have, pursuant to SDCL 24-2-1, charge and custody of all inmates confined in the SDSP.

2. Among the inmates under my charge and custody are those sentenced to death under SDCL ch. 23A-27A. In South Dakota, the punishment of death shall be inflicted by lethal injection. SDCL 23A-27A-32. Statute, as amended July 1, 2007, provides that, as Warden, I shall determine, subject to the approval of the Secretary of the South Dakota Department of Corrections (hereinafter SDDOC), the substances and the quantity of

EXHIBIT

12

substances used for the punishment of death. Prior to July 1, 2007, SDCL 23A-27A-32 provided for a two drug combination of substances to execute a death sentence, specifically, "The punishment of death shall be inflicted by the intravenous administration of an ultra-short-acting barbiturate in combination with a chemical paralytic agent and continuing the application thereof until the convict is pronounced ...".

3. In order to fulfill that responsibility, I, along with various members of my staff, undertook to adopt and implement, effective June 14, 2007, Emergency Response Manual A.12 entitled "Capital Punishment Final Days Procedures," (hereinafter ERM). As provided therein, I elected, with the approval of the Secretary of Corrections, to adopt the three drug protocol used by at least thirty other states, along with the federal government to execute prisoners. The ERM further provided, in accordance with SDCL 23A-27A-32.1, that those inmates sentenced to death prior to July 1, 2007, had the option of choosing to be executed using the three drug protocol or a two drug protocol consisting of an ultra short acting barbiturate in combination with a chemical paralytic agent.

4. Under the three drug protocol adopted in the aforementioned ERM, the lethal injection process involved the administration of chemicals as follows:

1. The first syringe contained three grams of sodium thiopental, an ultra short acting barbiturate, along with approximately thirty milliliters of a solution of sterile water;
2. The second syringe contained fifteen to twenty-five milliliters of saline to flush the IV line and to prevent any interaction between the first and second drug;

3. The third syringe contained one hundred milligrams of pancuronium bromide, a chemical paralytic agent, along with approximately fifty milliliters of a solution of sterile water;
4. The fourth syringe again contained fifteen to twenty-five milliliters of saline to flush the IV line; and
5. The fifth and final syringe contained not less than 140 mEq of potassium chloride, used to stop impulses to the heart, along with a solution of approximately seventy milliliters of sterile water.

Before carrying out the intravenous injections, I made every effort to ensure that the person administering those injections was adequately trained to do so.

5. The guidelines established by the American Medical Association prohibit physician participation in executions. State statute, therefore, provides that "the person administering the injection need not be a physician, registered nurse, or licensed practical nurse licensed or registered under the laws of this or any other state." SDCL 23A-27-32. As provided for in the 2007 ERM, I selected, with the approval of the secretary of the SDDOC, an executioner and a backup executioner trained to administer intravenous injections. As in Taylor v. Crawford, 487 F.3d 1072, 1082 (8th Cir. 2007), the IV team consisted of contracted medical personnel.

6. The aforementioned ERM was in place at the time of the Elijah Page execution on July 11, 2007. In accordance therewith, the individual I selected to insert the IV lines into inmate Page at the time of his execution had been a licensed/certified paramedic for over fifteen years and was trained and experienced in IV insertion.

7. According to eyewitnesses to the execution of Elijah Page, it was carried out in accordance with the established protocols and was described as being "done by the book and a bit like clockwork." Attachment A, Minnesota Public Radio. As indicated by Carson Walker, a reporter for the Associated Press, "it was just a matter of seconds . . . the next thing we heard were several gasps, it was almost like a snoring, and his chest heaved a couple of times."

8. A similar account was also given by Bill Harlan, *Rapid City Journal*, who was another eyewitness to the Page execution. In an article written for the *Rapid City Journal*, Mr. Harlan stated "Page never moved. Not his head, not his arms, not his feet." According to Harlan, inmate Page "gasped slightly. His chest heaved, but only a little, and he exhaled with what sounded like a snore." Attachment B.

9. Affiant remained in the execution chamber with inmate Page at all times during the scheduled execution. At no time whatsoever did I observe inmate Page display any signs of pain during his execution on July 11, 2007. There was no evidence of inmate Page crying out, writhing in pain, gasping for breath or otherwise moving during the execution process.

10. In the case of inmate Page, death occurred within a matter of minutes after the aforementioned chemicals were administered. Affiant believes that this clearly attests to the experience and efficiency of the executioners chosen to assist in carrying out the scheduled execution of inmate Page. Inmate Page's execution was carried out in accordance with the

established ERM and resulted in what appeared to be swift and painless a death as possible.

11. Subsequent to the execution of Elijah Page, Affiant learned, in discussions with legal counsel for the SDSP and the SDDOC, that the United State Supreme Court upheld the lethal injection protocols adopted by the Kentucky Department of Correction. Baze v. Rees, 553 U.S. 35, 128 S.Ct. 1520, 170 L.Ed.2d 520 (2008). In addressing further challenges to the lethal injection protocols adopted by other states, the Court held "a state with a lethal injection protocol substantially similar to [Kentucky's] . . . would not create a substantial risk of pain rising to the level of an Eighth Amendment violation." Clemons v. Crawford, 585 F.3d 1119, 1126 (8th Cir. 2009) (citing Baze, 553 U.S. at 61, 128 S.Ct. at 1537.

12. Affiant, in consultation with legal counsel, thereafter undertook to determine, in light of Baze, what, if any, changes to the then existing ERM would even further reduce what I believed to be an already remote possibility that a condemned inmate would experience any unnecessary pain during an execution by lethal injection. In doing so, Affiant also reviewed and relied on decisions from the Eighth Circuit Court of Appeals upholding, as constitutional, the lethal injection protocols adopted in Arkansas and Missouri. Clemons, 585 F.3d at 1128; Nooner v. Norris, 594 F.3d 592 (8th Cir. Ark. 2010).

13. Based on my consultations with counsel, as well as my review of the aforesaid case law, Affiant revised the ERM on August 12, 2010. Under the

revised protocols, the substances and quantity of substances used to inflict the punishment of death remain the same and have, pursuant to SDCL 23A-27A-32, been approved by the Secretary of Corrections. Those revisions incorporated yet additional safeguards to even further insure that the condemned inmate has been rendered unconscious by the proper administration of the first chemical, sodium thiopental, and thereby eliminate risks, however slim, that the inmate would experience any pain associated with the administration of pancuronium bromide and potassium chloride.

14. As amended, the current ERM goes even further than the Kentucky protocols approved in Baze and requires that members of the IV team responsible for establishing an IV infusion site have at least two years of experience as a medical or osteopathic physician, physician assistant, registered nurse, licensed practical nurse, certified medical assistant, phlebotomist, paramedic, emergency medical technician or military corpsman.

15. The amendments to the lethal injection protocols also include increasing the length of the interval between administration of the first and second injections. Under the protocols as they existed in 2007, "to assure the sodium pentothal has taken affect and the condemned is unconscious, there will be a pause before administering the next injection of approximately two minutes after the second injection is completed." That "pause," under the revised protocols, has now been increased to three minutes.

16. During that three-minute time period, Affiant and/or his designee will, using standard medical techniques such as checking the inmate for

movement, open eyes, eyelash reflex, and response to verbal commands and physical stimuli, verify that the inmate has indeed been rendered unconscious by the administration of the thiopental.

17. Affiant and/or his designee will also continuously monitor the primary infusion site for signs of any problem such as obvious swelling caused if the IV fluids or chemicals were to infiltrate into the tissue surrounding the IV site. If Affiant has any reason to believe that the primary IV site is not working or has become obstructed, I will immediately direct that the flow of chemicals be stopped to the primary IV site. The executioner would thereafter be instructed to administer an additional three (3) grams of thiopental to the inmate using the secondary or backup IV site.

18. Moreover, if Affiant, after that three-minute interval, has reason to believe that the inmate remains conscious, I and/or my designee will direct the executioner to administer the backup dose of sodium thiopental using the secondary IV line. The remaining chemicals, pancuronium bromide and potassium chloride, will be administered only after confirmation that the prisoner is unconscious and after a period of at least three minutes have elapsed from the injection of thiopental.

19. Affiant believes that these additional safeguards serve to even further insure that the thiopental is properly administered to the condemned inmate and thereby eliminate the possibility, however slim, that the inmate will experience any unnecessary pain resulting from the administration of pancuronium bromide and potassium chloride.

20. In the case of an inmate convicted and sentenced to death prior to July 1, 2007, who chooses, pursuant to SDCL 23A-27A-32.1, to be executed in the manner provided by South Dakota law at the time of his conviction and sentence, the current ERM adopted by Affiant includes a "two drug protocol," approved by the Secretary of Corrections, consisting of the administration of three (3) grams of sodium thiopental along with fifty milligrams of pancuronium bromide. Affiant believes that this will alleviate any concern by inmate Moeller that he may experience excruciating pain caused by the potassium chloride. Clements, 585 F.3d at 1124 (citing Taylor, 487 F.3d at 1074). An inmate electing to be executed using this two drug protocol will be able to avoid any alleged risk said to be associated with the third drug, potassium chloride.

21. As with the "three drug protocol," Affiant will, after administration of the sodium thiopental, wait for a period of at least three minutes before directing the executioner to commence administering the pancuronium bromide. During this interval, Affiant and/or his designee will again assess the inmate for any signs of consciousness using the aforementioned standard clinical techniques. If it appears to Affiant that the inmate still remains conscious within the three minutes after administering the thiopental, I will order that the flow of chemicals to the primary IV site be stopped. The executioner will then be directed by Affiant to administer an additional three (3) grams of thiopental to the inmate using the backup IV.

22. Affiant, along with the IV team, will continuously monitor the IV and infusion site. If there is any sign of infiltration or other problem with the IV site, Affiant will once again direct the executioner to stop the flow of chemicals to that site and resort to the use of the backup IV.

23. The executioners will commence the flow of pancuronium bromide only after Affiant and/or his designee has confirmed that the inmate has been rendered unconscious by the administration of the thiopental. If, after ten minutes following the administration of the pancuronium bromide, the person responsible for pronouncing death is not able to do so, Affiant will order the executioner to administer a second set of chemicals as described above.

24. Affiant is convinced that an inmate executed pursuant to the current ERM will not face any foreseeable risk of unnecessary pain during his/her execution. The ERM was revised by Affiant to eliminate any substantial risk of harm to the inmate undergoing a death by lethal injection in South Dakota.

Dated this 23 day of August, 2010.

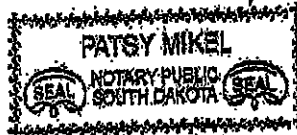

Douglas Weber, Warden
South Dakota State Penitentiary

Subscribed and sworn to before me this 23rd day of August, 2010.


Notary Public- South Dakota
My Commission expires: 6/16/2016

(SEAL)

pld_FG_Moeller v Weber - Affidavit of Weber (cr)



X3

**UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH DAKOTA
SOUTHERN DIVISION**

DONALD E. MOELLER,

Civ. 04-4200

Plaintiff,

**AFFIDAVIT OF
DOUGLAS WEBER**

v.

DOUGLAS WEBER, Warden, South
Dakota State Penitentiary, **DENNIS
KAEMINGK**, Secretary of the South
Dakota Department of Corrections,
and **DOES 1-20**, unknown
employees or agents of the South
Dakota Department of Corrections,

Defendants.

State of South Dakota *
* ss.
County of Minnehaha *

I, Douglas Weber, being first duly sworn upon oath, testify on personal knowledge and belief as follows:

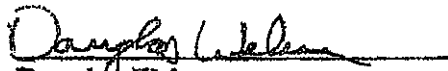
1. I am the warden of the South Dakota State Penitentiary. In that capacity I carried out the execution of Eric Donald Robert on October 14, 2012. Robert's execution was performed using compounded pentobarbital.
2. I was in the execution chamber standing at Robert's right shoulder during the entire execution. Once Robert made his last statement, I signaled the executioners in the chemical room to commence the injection.
3. Robert remained conscious for only 45 seconds following my signal. He thereafter lost consciousness, expelled a snore, and remained unconscious until he was pronounced dead by the coroner. Robert expelled his last breath approximately 90 seconds after I signaled to commence the injection. After approximately 10 minutes, Robert's pulse ceased. After approximately 20 minutes, all electrical activity in Robert's heart ceased and he was pronounced dead by the coroner. A copy of the official timeline is attached. A copy of the official timeline is attached.



1074

4. Robert exhibited virtually no signs of pain or physical distress during either the seconds he remained conscious after the injection commenced or during the period of unconsciousness before he died. Media witness accounts describing the execution as "rapid," "swift," and "painless" are accurate. Robert's lawyer's description of the execution as "orderly," "polished," and "peaceful" also accurately describes the event. Copies of these accounts are attached.
5. Donald Moeller will be executed with the same drug via the same protocol as Robert. Due to the then-pending litigation, I ordered that the drugs for Moeller's execution be tested. The pharmacist had the drugs tested by an independent lab. The testing informs me that the drug intended for use in Moeller's execution has passed authoritative USP standards for purity, potency, and sterility. A copy of the testing report is attached.

Dated this 22nd day of October 2012.


Douglas Weber

Subscribed and sworn to before me this 22nd day of October 2012.


Notary Public- South Dakota

(SEAL)

My commission expires: 6/16/16



Execution Timeline Record

Inmate name: Eric Robert

Inmate number: # 56564

Execution Date: 10/15/12

1. Removed from holding cell Time: 9:31 pm
2. Transferred to table Time: 9:38 pm
3. Restraints secured Time: 9:35 pm
4. IV started Time: Right arm 9:37 pm
Left arm 9:41 pm
(Note whether arm, leg, or other)
5. Begin escorting witnesses to viewing rooms Time: 9:46 pm
6. All witnesses present, Warden orders curtains opened Time: 9:53 pm, 9:59 pm
7. Secretary of Corrections informs Warden that he/she is cleared to proceed with the execution Time: 10:00 pm
8. Last statement Time: 10:01 pm
9. Injections begin Time: 10:01 pm
10. Injections completed Time: 10:04 pm
11. Second set of injections required? YES ☒ NO
 - a. If yes, time second injections were started. Time: _____
 - b. Time second injections completed. Time: _____
12. Time death was pronounced Time: 10:24 pm
13. Curtains closed Time: 10:25 pm

uring a news conference at the South Dakota State Penitentiary. That followed the execution of Eric other death row inmate, Donald Moeller, is scheduled to be executed this month. ELISHA PAGE / ARGUS LEADER

ONLINE

WATCH: See video from the scene Monday, a post-execution news conference, court proceedings in the case and documents. **CHAT:** Watch a replay of a chat Monday with Managing Editor Patrick Lalley and reporter John Hult about the case. **ARGUSLEADER.COM/EXECUTION BLOG:** See photo galleries, video interviews and more in a special online section **ARGUSLEADER.COM/EXECUTIONS**

INSIDE

FAMILY: Slain prison guard's family reacts
VIGILS: Death penalty supporters, opponents
MOOD: Reaction in Sioux Falls
TIMELINE: Events leading to the execution
STORIES: Pages 4-6A

Witnessing death final step in sad saga

By John Hult
jhult@argusleader.com

By the time you read this, Eric Robert will be dead, executed by lethal injection for the murder of Corrections Officer Ron Johnson.

Through the window of a tiny exam room, seven other people and I watched Robert leave his last breaths and speak his last words.

Two were deputies for Attorney General Marty Jackley, who watched the death from one of the other three rooms. A reporter from the Associated

Press and I joined them, Minnehaha County Jail Warden Darin Young and three other employees of the DOC in the room.

My job as a media witness was to observe, walk back to a briefing room in the Ronald "R.J." Johnson training center and answer questions from other reporters about what happened.

I'd never witnessed an execution until last night, so I called three reporters who had, to gather insight.

The consensus: The death it-

See WITNESS, Page 6A

Breast cancer care gets lift

\$5M from Helmsley trust to benefit treatment in remote areas

By Jon Walker
jwalker@argusleader.com

A research group including Ara Health received \$3.5 million Monday for a breast cancer program that will use genetics to personalize treatment for men.

The grant from the Leona M. Harry B. Helmsley Charitable Trust will support an effort to analyze DNA, compare treat-



Amy Krie

in the Dakotas, Montana, Wyoming and Nebraska. "This grant will open new doors of opportunity and lead to better care for patients in our region and across the nation," said Dr. Amy Krie, medical oncologist with the Avera Cancer Institute.

the Ramkota Inn in Sioux Falls. The direct recipient of the money will be the University of Nebraska Medical Center in Omaha. The university's Eppley Cancer Center will work with Avera, the Trinity Health Cancer Center in Minot, N.D., and the Welch Cancer Center at Sheridan Memorial Hospital in Wyoming.

The grant is part of an overall \$5.9 million project, with the



ARGUSLEADER.COM

6A

LOCAL

Witness: Family, friends will cope with

Continued from Page 1A

self, so long as nothing goes wrong, essentially is a non-event for the witnesses.

They were right. When Warden Doug Weber asked Associate Warden Troy Ponto to open the white blinds that covered our windows from the inside of the execution chamber, Robert already was strapped down. He had needles in his arms and cloth bandages securing his hands.

He was clean-shaven. His hair was short. His face expressionless.

Warden Doug Weber asked for his last words:

The last three stood out: "It is done," spoken with pauses, as though each word were its own sentence.

He closed his eyes and whispered what sounded like prayers to himself for about a minute. Three minutes after 10 p.m., he heaved three or four heavy sighs and made a sound similar to the clearing of a dry throat.

His eyes suddenly opened, and his chest stopped moving. His eyes remained open as the assistant coroner checked for a pulse at his wrist, chest and neck.

Three minutes. His skin tone had changed by 10:25 p.m., when coroner Kenneth Snell pronounced him dead, but nothing else about Robert changed after 10:03.

When Elijah Page was executed in 2007, the entire process, from his arrival in the execution chamber to the pronouncement of his death, took 31 minutes. He stopped moving six minutes after the drugs were administered after a single, remaining snore. He was



Execution witnesses, Dave Kolpack, Associated Press and John Hult, Argus Leader, speak during a news conference following the execution of Eric Robert on Monday at the South Dakota State Penitentiary in Sioux Falls. Robert confessed to murdering corrections officer Ronald "R.J." Johnson during an escape attempt in April 2011. ELISHA PAGE/ARGUS LEADER

pronounced dead at 10:11 p.m.

The minutes before Robert's execution were more troubling than the death. We were guided from the front door through the penitentiary's West Gate. That's the gate where Robert and his accomplice Rodney Berget were captured after killing Johnson.

We walked through the prison yard and into the old infirmary, where we all sat — mostly in silence — in an office filled with photos of Little League games. The leader for our group then took us to the exam room, which still is used to treat patients.

It's ironic that the lives of death row inmates are taken in such a rapid, painless fashion inside what is essentially a working clinic. The media blitz sur-

rounding the death, the years of legal scrutiny, the preparations — all of it leads to a supposedly painless killing that lasts just a matter of minutes.

It's a manner of death reserved only for people executed in the United States.

It stands in stark contrast to the experience of the victims.

The Johnson family's private tragedy has played out in the public to excruciating effect since April 12, 2011, the day Robert and Berget killed Johnson.

I feel, as anyone who's followed the case closely surely does, that I know Johnson on some level.

He was beloved at home and at work and seemed to have no enemies to speak of, despite his 23 years as an authority figure at a high-security prison.

He was working on his 63rd birthday, his day off, covering a shift at someone else's post.

I feel as though I know Robert on some level, as well, having read about and researched his life.

I imagine some people believe journalists enjoy talking to grieving families, following tragedy or witnessing and hearing horrors recalled and recounted.

I've never met a journalist who does.

It's part of the job, which is to keep readers informed of what the government — including the police and courts — is up to.

In practice, for those closest to a crime, we become part of the emotional grinder that victims, criminals and their families are put through after a murder takes place.

Just as they are dragged into the justice system willingly by a crime or other's creation, they are dragged into the spot and become public figures.

The families identify bodies, spend hours with detectives, through trials and findings and sometimes defy, reliving their experiences. They listen to defense lawyers question their credibility, down the crimes that hurt them, ask judges to show mercy to their wrongdoers rather than victims shown.

The families and friends of the crime have to live with the remnants of the victims' lives and the public, live with the shame.

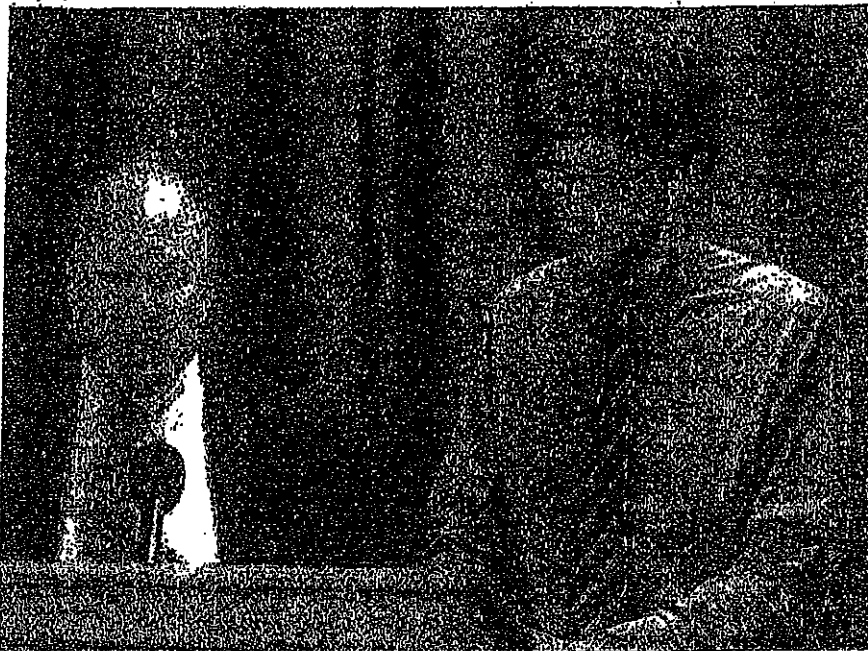
All of those people are at risk of getting a call from someone like me who

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LOCAL

Tuesday, October 16, 2012

mily, friends will cope with aftermath



Dave Kolpack, Associated Press and John Hult, Argus Leader, speaks during a news conference on of Eric Robert on Monday at the South Dakota State Penitentiary in Sioux Falls. Robert confessed to killing officer Ronald "R.J." Johnson during an escape attempt in April 2011. ELISHA PAGE / ARGUS LEADER

ONLINE

John Hult has been the public safety reporter since 2009. Follow his blog on crime and courts at <http://jhult.tumblr.com/>.

ask them to repeat and relive those experiences in the name of an informed public.

It's not easy to hear a person cry on the other end of a telephone.

At this point, I've spent weeks thinking about the tears shed by Lynette Johnson and her children, Missy and Jesse, at Robert's sentence hearing.

Will Lynette, who spent only six nights away from her husband in 32 years, feel some measure of closure now?

How will Missy and Jesse, who struggled to explain the loss of "Papa" to their young children, explain what happened Monday?

And what of Robert's family? What of his 72-year-old mother, who worked three jobs in hopes of seeing her children grow into a better life? What was she experiencing as her only son's death approached?

As a crime reporter in a state that puts its worst offenders to death, it was my duty to report the details of the execution. I've been mentally preparing for this.

I realize that emotional separation is a fantasy, but I'm doing my job. So were Attorney General Marty Jackley, Minnehaha County State's Attorney Aaron McGowan, and many of the other witnesses.

Robert's swift, painless end will resonate for the other witnesses far more than it will for us.

at 10:11 rounding the death, the years of legal scrutiny, the preparations — all of it leads to a supposedly painless killing that lasts just a matter of minutes.

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In practice, for those closest to a crime, we become part of the emotional grinder that victims, criminals and their families are put through after a murder takes place.

Just as they are dragged into the justice system unwillingly by a crime of another's creation, they are dragged into the spotlight and become public figures.

The families identify bodies, spend hours talking with detectives, sit through trials and hearings and sometimes testify, reliving their experiences. They listen to defense lawyers question their credibility, downplay the crimes that hurt them then ask judges to show their wrongdoers more mercy than victims were shown.

The families and friends of the criminals have to live with the judgments of the victims' families and the public and live with the shame.

All of those people are at risk of getting a call from someone like me who will

The Washington Post

[Back to previous page](#)



South Dakota inmate who killed prison guard put to death in state's first execution since 2007

By Associated Press, Published: October 15

SIOUX FALLS, S.D. — A South Dakota man who beat a prison guard with a pipe and covered his head in plastic wrap to kill him during a failed escape attempt was put to death Monday, in the state's first execution since 2007.

Eric Robert, 50, received lethal injection and was pronounced dead at the state penitentiary in Sioux Falls at 10:24 p.m. He is the first South Dakota inmate to die under the state's new single-drug lethal injection method, and only the 17th person to be executed in the state or Dakota Territory since 1877.

Robert had no expression on his face. Asked if he had a last statement, Robert said: "In the name of justice and liberty and mercy, I authorize and forgive Warden Douglas Weber to execute me for the crimes. It is done."

As the drug was administered, the clean-shaven Robert, wearing orange inmate pants with a white blanket wrapped around his upper body, appeared to be clearing his throat and then began gasping heavily. He then snored for about 30 seconds. His eyes remained opened throughout and his skin turned pale, eventually gaining a purplish hue.

Robert was put to death in the same prison where he killed guard Ronald "RJ" Johnson during an escape attempt on April 12, 2011. Robert was serving an 80-year sentence on a kidnapping conviction when he

<http://www.washingtonpost.com/national/south-dakota-inmate-who-killed-prison-guard-s...> 10/19/2012

1080

tried to break out with fellow inmate Rodney Berget, 50.

Johnson's widow, Lynette, said after the execution that she knows Robert's death will not bring back her husband, her children's father or her grandchildren's grandfather.

"But we do know that the employees of the Department of Corrections and the public in general will be just a little bit safer now," Lynette Johnson said. "We need to have more attention and focus on the safety of all of the correctional officers in the state of South Dakota. Ron, none of you will ever know how great he is and is missed. We stand proud for Ron."

Lynette Johnson, her two children and their spouses all witnessed the execution. No one from Robert's family was in attendance.

Robert ate his last meal of ice cream with his lawyer, Mark Kadi, on Saturday night before fasting for 40 hours for religious reasons.

After the execution, Kadi said the execution was very "orderly and polished."

"The problem was it was too orderly. It was so antiseptic and peaceful that it masked what was being done to the person," Kadi said. "If more people were able to see the events, there would be fewer of them."

Johnson was working alone the morning of his death — also his 63rd birthday — in a part of the prison known as Pheasantland Industries, where inmates work on upholstery, signs, custom furniture and other projects. Authorities said the inmates beat Johnson with a pipe, covered his head in plastic wrap and left his body on the floor.

Robert then put on Johnson's pants, hat and jacket and approached the prison's west gate. With his head down, he pushed a cart loaded with two boxes. Berget was hidden in one of the boxes, according to a report filed by a prison worker after the slaying.

Other guards became suspicious as the men got closer to the gate. When confronted, Robert beat one guard; other guards quickly arrived and detained both inmates.

Months later, Robert told a judge his only regret was that he hadn't killed more guards. He pleaded guilty to Johnson's slaying and asked to be sentenced to death, telling a judge last October that he would otherwise kill again. He never appealed his sentence and even tried to bypass a mandatory state review in hopes of expediting his death.

Berget also has pleaded guilty in the killing but has appealed his death sentence. A third inmate, Michael Nordman, 47, was given a life sentence for providing materials used in the slaying.

Robert's execution could be the first of two in as many weeks. Donald Moeller is scheduled to be put to death the week of Oct. 28 for the 1990 kidnapping, rape and murder of a 9-year-old girl. Robert had been on death row only for about a year; Moeller has been there for more than two decades. Only three other inmates currently are on the state's death row.

South Dakota's last execution before Monday took place in 2007, and that was the first in the state for 60 years.

"You have few people on death row, few executions, and then you have this coincidence of cases coming all at once," said Richard Dieter, executive director of the nonprofit Death Penalty Information Center. "When people waive appeals, their cases start to move more quickly."

Associated Press writers Amber Hunt in Sioux Falls and Blake Nicholson in Bismarck contributed to this report.

Follow Kristi Eaton on Twitter at <http://twitter.com/kristieaton>.

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UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH DAKOTA
SOUTHERN DIVISION

DONALD E. MOELLER,

Civ. 04-4200

Plaintiff,

AFFIDAVIT OF DEPONENT # 1

v.

DOUGLAS WEBER, Warden, South
Dakota State Penitentiary, DENNIS
KAEMINGK, Secretary of the South
Dakota Department of Corrections,
and DOES 1-20, unknown
employees or agents of the South
Dakota Department of Corrections,

Defendants.

State of South Dakota *
* ss.
County of Minnehaha *

I, Deponent # 1, being first duly sworn upon oath, testify on personal
knowledge and belief as follows:

1. Deponent # 1 compounded drugs intended for use in Donald Moeller's
execution on or about October 3, 2012. The drugs were compounded on
this date to allow time for testing prior to Moeller's execution.
2. Deponent # 1 submitted a test sample of the compounded drug to a lab
customarily used by my pharmacy. The lab was chosen by me with no
influence from the state. On October 17, 2012, the lab reported that the
drug I compounded meets USP standards for purity, potency, sterility,
and 30-day stability. A redacted report is attached.

Dated this 22nd day of October 2012.

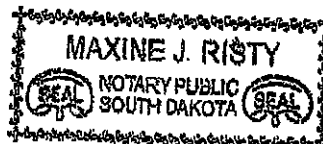
Deponent #1
Deponent # 1

Subscribed and sworn to before me this 22nd day of October 2012.

Maxine J. Risty
Notary Public-South Dakota

(SEAL)

My commission expires: October 15, 2017



Product Release Report
FINAL DATA

Report Date 10/17/2012

Sponsor

Sample No. 39521

Product Description Sodium Pentobarbital 80 mg/ml
Lot No. 1045082A
Expiry 11/1/2012

Release Specification: SPEC-PSSD-006.0

Procedure	Specification	Final Data	Status	Date of Test	Reference
Pyrogen	NMT 0.8 EU/mL	0.48 EU/mL	Passes	10/4/2012	USP <85>
Sterility	Negative	Negative	Passes	10/3/2012	USP <71>
Fungal Screening	Negative	Negative	Passes	10/3/2012	USP <71>
HPLC	90-110% as Sodium Pentobarbital	106.7% 83.8 mg/ml	Passes	10/4/2012	HPLC-TM-217.0

ate Received: 10/3/2012
Quantity Received: 1 x 40 ml

Carrier:
Tracking No.:

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1/2

1084

STATE OF SOUTH DAKOTA
COUNTY OF PENNINGTON

CHARLES RUSSELL RHINES

Petitioner,

vs.

DOUGLAS WEBER, Warden, South Dakota State Penitentiary,

Respondent.

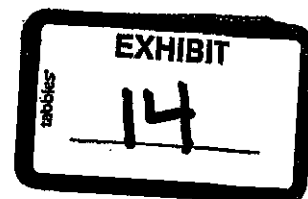
IN CIRCUIT COURT
SEVENTH JUDICIAL CIRCUIT

CTV. 02-924

AFFIDAVIT OF DOUGLAS WEBER

Affiant, after first being sworn upon his oath, states as follows:

1. If called at trial, affiant would testify to the following facts.
2. I am the Warden of the South Dakota State Penitentiary. In that capacity I carried out the execution of Donald Eugene Moeller on October 30, 2012. Moeller's execution was performed using compounded pentobarbital.
3. I was in the execution chamber standing at Moeller's right shoulder during the entire execution. Once Moeller made his initial last statement, I signaled the executioners in the chemical room to commence the injection.
4. After about 30 seconds, Moeller uttered a final sentence in response to sounds being made by locked-down inmates housed in the same wing of the building where the execution chamber is located. Approximately 15 seconds after this final sentence, Moeller lost consciousness and expelled a faint snore. Moeller remained unconscious until he was pronounced dead by the coroner. Moeller expelled a few last deep breaths approximately 60 seconds after I signaled to commence the injection. Visible indicators of a pulse ceased after approximately 4 minutes. After approximately 23 minutes, Moeller was pronounced dead by the coroner. A copy of the official execution timeline record is attached hereto as Exhibit 1.
5. Moeller exhibited virtually no signs of pain or physical distress during either the seconds he remained conscious after the injection commenced or during the period of unconsciousness before he died. A media witness described the execution as "very quick." The witness "didn't see him [Moeller] in any pain at all." According to the witness, Moeller's execution was, like reports of the Robert execution, "very



0986

clinical. Very quick. If this man [Moeller] was in pain, [the witness] didn't see it." Moeller was "gone" in "a matter of [a] minutes." Excerpts of the media witness' public statements are attached hereto as Exhibit 2 and are an accurate description of the event.

6. Moeller was executed via the same protocol and with the same drug intended for use in the execution of Charles Russell Rhines. Due to then-pending litigation in Moeller's case, I ordered the drugs for Moeller's execution tested. The pharmacist had the drugs tested by an independent lab. The testing informed me that the compounded pentobarbital used in Moeller's execution had passed authoritative USP standards for purity, potency, and sterility. A copy of the testing report is attached as Exhibit 3.

Dated this 1 day of November 2012.

Douglas Weber
Douglas Weber

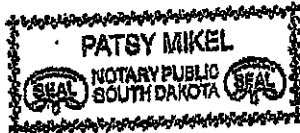
Subscribed to and sworn before me this 1 day of November 2012.

Patsy Mikel
Notary Public

My Commission Expires:

6/16/16

SEAL



Execution Timeline Record

Inmate name: **Donald Moeller**



Inmate number: **# 28137**

Execution Date: 10/30/12

1. Removed from holding cell Time: 9:38 am
2. Transferred to table Time: 9:39 am
3. Restraints secured Time: 9:41 am
4. IV started Time: Right arm 9:43 am
Left arm 9:49 am
(Note whether arm, leg, or other)
5. Begin escorting witnesses to viewing rooms Time: 9:53 am
6. All witnesses present. Time: 9:57 am
7. Warden orders curtains opened. Time: 9:59 am
8. Secretary of Corrections informs Warden that the Warden is cleared to proceed with the execution. Time: 10:00 am
9. Last statement Time: 10:01 am
10. Injections begin Time: 10:01 am
11. Injections completed Time: 10:04 am
12. Second set of injections required? YES ☒ NO
a. If yes, time second injections were started. Time: _____
b. Time second injections completed. Time: _____
13. Death pronounced Time: 10:24 am
14. Curtains closed Time: 10:24 am






0988



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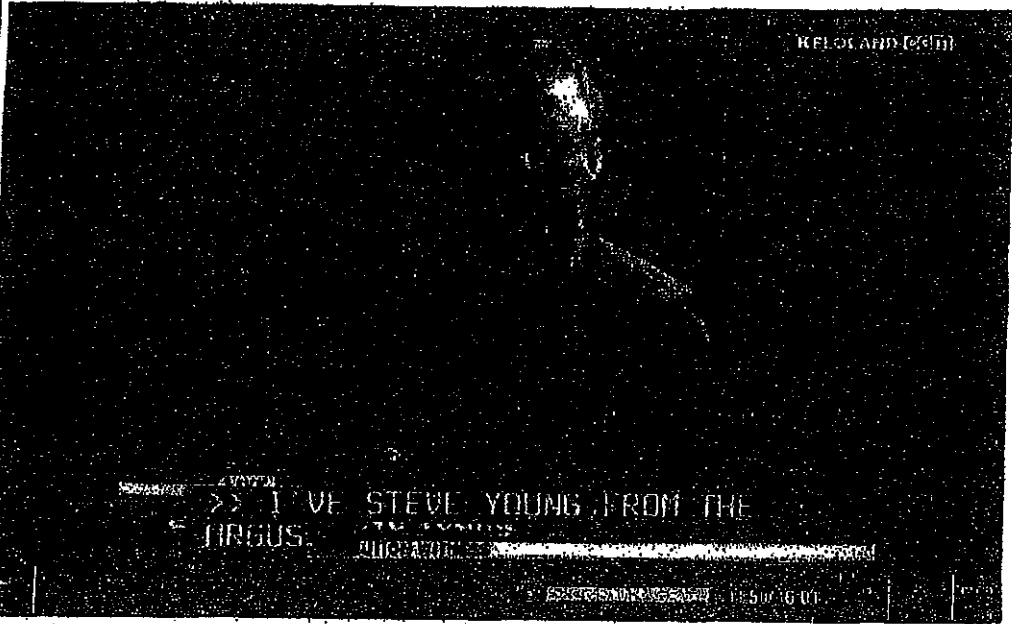
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State Executes Donald Moeller

The Sioux Falls man who just recently admitted killing a 9-year-old girl 22 years ago has been executed at the South Dakota State Penitentiary.

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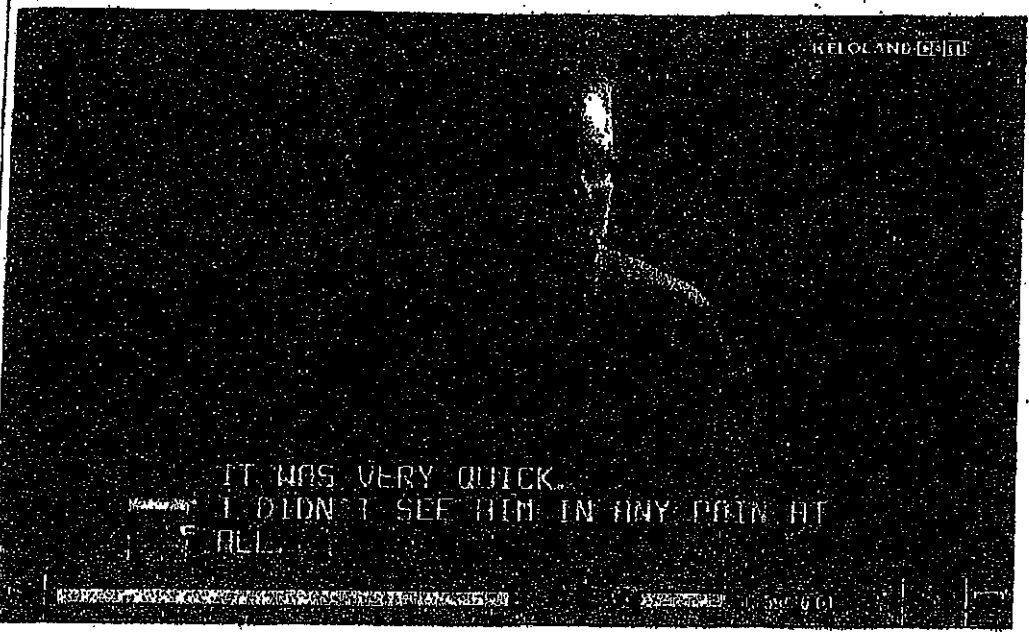
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IT WAS VERY QUICK.
I DIDN'T SEE HIM IN ANY PAIN AT ALL.

00:00 / 00:00

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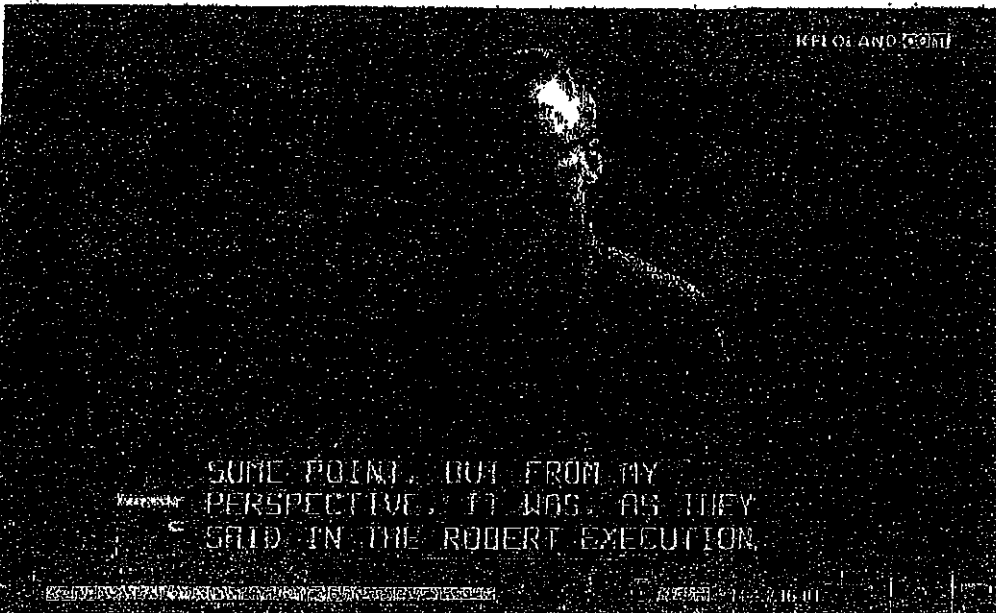
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SOME POINT, BUT FROM MY PERSPECTIVE, IT WAS, AS THEY SAID IN THE ROBERT EXECUTION.

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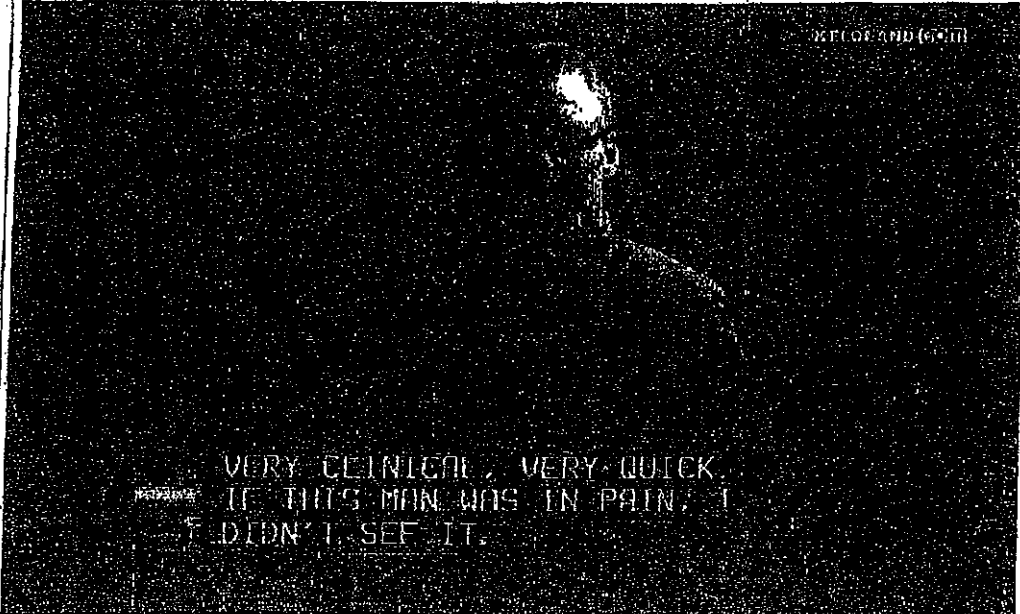
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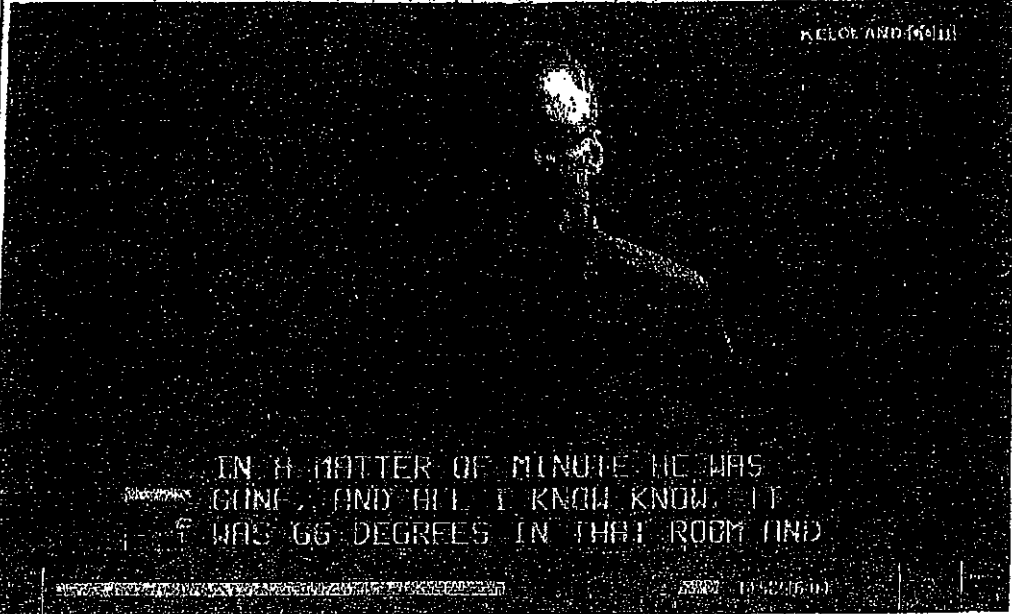
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IN A MATTER OF MINUTE HE WAS GUNED... AND ALL I KNOW KNOW IT WAS 66 DEGREES IN THAT ROOM AND

10/31/2012

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Added October 30, 2012 9:36 PM

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**UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH DAKOTA
SOUTHERN DIVISION**

DONALD E. MOELLER,

Civ. 04-4200

Plaintiff,

AFFIDAVIT OF DEPONENT # 1

v.

**DOUGLAS WEBER, Warden, South
Dakota State Penitentiary, DENNIS
KAEMINGK, Secretary of the South
Dakota Department of Corrections,
and DOES 1-20, unknown
employees or agents of the South
Dakota Department of Corrections,**

Defendants.

State of South Dakota *

* ss.

County of Minnehaha *

I, Deponent # 1, being first duly sworn upon oath, testify on personal knowledge and belief as follows:

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2. Deponent # 1 submitted a test sample of the compounded drug to a lab customarily used by my pharmacy. The lab was chosen by me with no influence from the state. On October 17, 2012, the lab reported that the drug I compounded meets USP standards for purity, potency, sterility, and 30-day stability. A redacted report is attached.

Dated this 22nd day of October 2012.

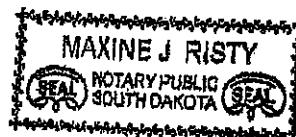
[Signature]
Deponent # 1

Subscribed and sworn to before me this 22nd day of October 2012.

[Signature]
Notary Public - South Dakota

(SEAL)

My commission expires: October 15, 2017



0994

Product Release Report
FINAL DATA

Report Date 10/17/2012

Sponsor

Sample No. 38521

Product Description Sodium Pentobarbital 50 mg/ml
Lot No. 1045082A
Expiry 11/1/2012

Release Specification: SPEC-PSSD-008.0

Procedure	Specification	Final Data	Status	Date of Test	Reference
Pyrogen	NMT 0.8 EU/mL	0.49 EU/mL	Passes	10/4/2012	USP <85>
Sterility	Negative	Negative	Passes	10/9/2012	USP <71>
Fungal Screening	Negative	Negative	Passes	10/3/2012	USP <71>
HPLO	90-110% as Sodium Pentobarbital	106.7% 53.5 mg/ml	Passes	10/4/2012	HPLC-TM-217.D

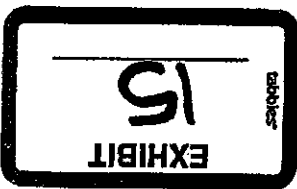
Date Received: 10/3/2012
Quantity Received: 1 x 40 ml

Carrier:
Tracking No.:

This report shall not be reproduced except in full, without written approval from

1/2

0995



135 S.Ct. 2726

Supreme Court of the United States
Richard E. GLOSSIP, et al., Petitioners
v.

Kevin J. GROSS, et al.
No. 14-7955.

Argued April 29, 2015. Decided June 29, 2015.

Synopsis

Background: State death-row inmates brought § 1983 action alleging that Oklahoma's three-drug lethal injection protocol created an unacceptable risk of severe pain in violation of Eighth Amendment. The United States District Court for the Western District of Oklahoma, Stephen P. Friot, J., 2014 WL 7671680, entered an order denying inmates' motion for a preliminary injunction, and they appealed. The United States Court of Appeals for the Tenth Circuit, Briscoe, Chief Judge, 776 F.3d 721, affirmed. Certiorari was granted.

Holdings: The Supreme Court, Justice Alito, held that:

1 inmates failed to establish that any risk of harm was substantial when compared to a known and available method of execution, and
2 district court did not commit clear error in finding that midazolam was likely to render an inmate unable to feel pain.

Affirmed.

Justice Scalia filed a concurring opinion in which Justice Thomas joined.
Justice Thomas filed a concurring opinion in which Justice Scalia joined.
Justice Breyer filed a dissenting opinion in which Justice Ginsburg joined.
Justice Sotomayor filed a dissenting opinion in which Justices Ginsburg, Breyer, and Kagan joined.

910 Petitioners attack the District Court's findings of fact on two main grounds.³ First, they argue that even if midazolam is powerful enough to induce unconsciousness, it is too weak to maintain unconsciousness and insensitivity to pain once the second and third drugs are administered. Second, while conceding that the 500-milligram dose of midazolam is much higher than the normal therapeutic dose, they contend that this fact is irrelevant because midazolam has a "ceiling effect"—that is, at a certain point, an increase in the dose administered will not have any greater effect on the inmate. Neither argument succeeds.

The District Court found that midazolam is capable of placing a person "at a sufficient level of unconsciousness to resist the noxious stimuli which could occur from the application of the second and third drugs." App. 77. This conclusion was not clearly ***2741** erroneous. Respondents' expert, Dr. Evans, testified that the proper administration of a 500-milligram dose of midazolam would make it "a virtual certainty" that any individual would be "at a sufficient level of unconsciousness to resist the noxious stimuli which could occur from application of the 2nd and 3rd drugs" used in the Oklahoma protocol. *Id.*, at 302; see also *id.*, at 322. And petitioners' experts acknowledged that they had no contrary scientific proof. See *id.*, at 243-244 (Dr. Sasich stating that the ability of midazolam to render a person insensate to the second and third drugs "has not been subjected to scientific testing"); *id.*, at 176 (Dr. Lubarzky stating that "there is no scientific literature addressing the use of midazolam as a manner to administer lethal injections in humans").

In an effort to explain this dearth of evidence, Dr. Sasich testified that "[i]t's not my responsibility or the [Food and Drug Administration's] responsibility to prove that the drug doesn't work or is not safe." Tr. of Preliminary Injunction Hearing 357 (Tr.). Instead, he stated, "it's the responsibility of the proponent to show that the drug is safe and effective." *Ibid.* Dr. Sasich confused the standard imposed on a drug manufacturer seeking approval of a therapeutic drug with the standard that must be borne by a party challenging a State's lethal injection protocol. When a method of execution is authorized under state law, a party contending that this method violates the Eighth Amendment bears the burden of showing that the method creates an unacceptable risk of pain. Here, petitioners' own experts effectively conceded that they lacked evidence to prove their case beyond dispute.

Petitioners attempt to avoid this deficiency by criticizing respondents' expert. They argue that the District Court should not have credited Dr. Evans' testimony because he admitted that his findings were based on "extrapolations]" "from studies done about much lower therapeutic doses of midazolam. See Brief for Petitioners 34 (citing Tr. 667-668; emphasis deleted). But because a 500-milligram dose is never administered for a therapeutic purpose, extrapolation was reasonable. And the conclusions of petitioners' experts were also based on extrapolations and assumptions. For example, Dr. Lubarzky relied on "extrapolation of the ceiling effect data." App. 177. Based on the evidence that the parties presented to the District Court, we must affirm. Testimony from both sides supports the District Court's conclusion that midazolam can render a person insensate to pain. Dr. Evans testified that although midazolam is not an analgesic, it can nonetheless "render the person unconscious and 'insensate' during the remainder of the procedure." *Id.*, at 294. In his discussion about the ceiling effect, Dr. Sasich

agreed that as the dose of midazolam increases, it is "expected to produce sedation, amnesia, and finally lack of response to stimuli such as pain (unconsciousness)." *Id.*, at 243. Petitioners argue that midazolam is not powerful enough to keep a person insensate to pain after the administration of the second and third drugs, but Dr. Evans presented creditable testimony to the contrary. See, e.g., Tr. 661 (testifying that a 500-milligram dose of midazolam will induce a coma).⁴ Indeed, low doses of midazolam [2742] are sufficient to induce unconsciousness and are even sometimes used as the sole relevant drug in certain medical procedures. Dr. Sasich conceded, for example, that midazolam might be used for medical procedures like colonoscopies and gastroscopies. App. 267-268; see also Brief for Respondents 6-8.

Petitioners emphasize that midazolam is not recommended or approved for use as the sole anesthetic during painful surgery, but there are two reasons why this is not dispositive. First, as the District Court found, the 500-milligram dose at issue here "is many times higher than a normal therapeutic dose of midazolam." App. 76. The effect of a small dose of midazolam has minimal probative value about the effect of a 500-milligram dose. Second, the fact that a low dose of midazolam is not the *best* drug for maintaining unconsciousness during surgery says little about whether a 500-milligram dose of midazolam is *constitutionally adequate* for purposes of conducting an execution. We recognized this point in *Baze*, where we concluded that although the medical standard of care might require the use of a blood pressure cuff and an electrocardiogram during surgeries, this does not mean those procedures are required for an execution to pass Eighth Amendment scrutiny. 553 U.S., at 60, 128 S.Ct. 1520.

Okahoma has also adopted important safeguards to ensure that midazolam is properly administered. The District Court emphasized three requirements in particular: The execution team must secure both a primary and backup IV access site, it must confirm the viability of the IV sites, and it must continuously monitor the offender's level of consciousness. The District Court did not commit clear error in concluding that these safeguards help to minimize any risk that might occur in the event that midazolam does not operate as intended. Indeed, we concluded in *Baze* that many of the safeguards that Okahoma employs—including the establishment of a primary and backup IV and the presence of personnel to monitor an inmate—help in significantly reducing the risk that an execution protocol will violate the Eighth Amendment. *Id.*, at 55-56, 128 S.Ct. 1520. And many other safeguards that Okahoma has adopted mirror those that the dissent in *Baze* complained were absent from Kentucky's protocol in that case. For example, the dissent argued that because a consciousness check before injection of the second drug "can

reduce a risk of dreadful pain," Kentucky's failure to include that step in its procedure was unconstitutional. *Id.*, at 119, 128 S.Ct. 1520 (opinion of GINSBURG, J.). The dissent also complained that Kentucky did not monitor the effectiveness of the first drug or pause between injection of the first and second drugs. *Id.*, at 120-121, 128 S.Ct. 1520. Oklahoma has accommodated each of those concerns.

B

Petitioners assert that midazolam's "ceiling effect" undermines the District Court's **[2743]** finding about the effectiveness of the huge dose administered in the Oklahoma protocol. Petitioners argue that midazolam has a "ceiling" above which any increase in dosage produces no effect. As a result, they maintain, it is wrong to assume that a 500-milligram dose has a much greater effect than a therapeutic dose of about 5 milligrams. But the mere fact that midazolam has such a ceiling cannot be dispositive. Dr. Sasich testified that "all drugs essentially have a ceiling effect." Tr. 343. The relevant question here is whether midazolam's ceiling effect occurs below the level of a 500-milligram dose and at a point at which the drug does not have the effect of rendering a person insensate to pain caused by the second and third drugs. Petitioners provided little probative evidence on this point, and the speculative evidence that they did present to the District Court does not come close to establishing that its factual findings were clearly erroneous. Dr. Sasich stated in his expert report that the literature "indicates" that midazolam has a ceiling effect, but he conceded that he "was unable to determine the midazolam dose for a ceiling effect on unconsciousness because there is no literature in which such testing has been done." App. 243-244. Dr. Lubarsky's report was similar, *id.*, at 171-172, and the testimony of petitioners' experts at the hearing was no more compelling. Dr. Sasich frankly admitted that he did a "search to try and determine at what dose of midazolam you would get a ceiling effect," but concluded: "I could not find one." Tr. 344. The closest petitioners came was Dr. Lubarsky's suggestion that the ceiling effect occurs "[p]robably after about ... 40 to 50 milligrams," but he added that he had not actually done the relevant calculations, and he admitted: "I can't tell you right now" at what dose the ceiling effect occurs. App. 225. We cannot conclude that the District Court committed clear error in declining to find, based on such speculative evidence, that the ceiling effect negates midazolam's ability to render an inmate insensate to pain caused by the second and third drugs in the protocol. The principal dissent discusses the ceiling effect at length, but it studiously avoids suggesting that petitioners presented probative evidence about the dose at which the ceiling effect occurs or about whether the effect occurs before a person becomes insensate to pain. The principal dissent avoids these critical issues by suggesting that such evidence is "irrelevant if there is

no dose at which the drug can ... render a person 'insensate to pain.' " *Post*, at 2789. But the District Court heard evidence that the drug can render a person insensate to pain, and not just from Dr. Evans: Dr. Sasich (one of petitioners' own experts) testified that higher doses of midazolam are "expected to produce ... lack of response to stimuli such as pain." App. 243.

In their brief, petitioners attempt to deflect attention from their failure of proof regarding midazolam's ceiling effect by criticizing Dr. Evans' testimony. But it was *petitioners'* burden to establish that midazolam's ceiling occurred at a dosage below the massive 500-milligram dose employed in the Oklahoma protocol and at a point at which the drug failed to render the recipient insensate to pain. They did **"2744"** not meet that burden, and their criticisms do not undermine Dr. Evans' central point, which the District Court credited, that a properly administered 500-milligram dose of midazolam will render the recipient unable to feel pain.

One of petitioners' criticisms of Dr. Evans' testimony is little more than a quibble about the wording chosen by Dr. Evans at one point in his oral testimony. Petitioners' expert, Dr. Lubarisky, stated in his report that midazolam "increases effective binding of [gamma-aminobutyric acid (GABA)] to its receptor to induce unconsciousness." App. 172. Dr. Evans' report provided a similar explanation of the way in which midazolam works, see *id.*, at 293-294, and Dr. Lubarisky did not dispute the accuracy of that explanation when he testified at the hearing. Petitioners contend, however, that Dr. Evans erred when he said at the hearing that "[m]idazolam attaches to GABA receptors, *inhibiting* GABA." *Id.*, at 312 (emphasis added). Petitioners contend that this statement was incorrect because "far from *inhibiting* GABA, midazolam *facilitates* its binding to GABA receptors." Brief for Petitioners 38. In making this argument, petitioners are simply quarrelling with the words that Dr. Evans used during oral testimony in an effort to explain how midazolam works in terms understandable to a layman. Petitioners do not suggest that the discussion of midazolam in Dr. Evans' expert report was inaccurate, and as for Dr. Evans' passing use of the term "inhibiting," Dr. Lubarisky's own expert report states that GABA's "*inhibition* of brain activity is accentuated by midazolam." App. 232 (emphasis added). Dr. Evans' oral use of the word "inhibiting"—particularly in light of his written testimony—does not invalidate the District Court's decision to rely on his testimony.

Petitioners also point to an apparent conflict between Dr. Evans' testimony and a declaration by Dr. Lubarisky (submitted after the District Court ruled) regarding the biological process that produces midazolam's ceiling effect. But even if Dr. Lubarisky's declaration is correct, it is largely beside the point. What matters for present purposes is the dosage at which the ceiling effect kicks in, not the biological process that produces the effect. And Dr. Lubarisky's

declaration does not render the District Court's findings clearly erroneous with respect to that critical issue.

DECLARATION OF JOSEPH F. ANTOGNINI, M.D., M.B.A.

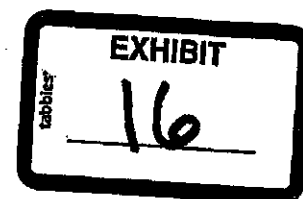
JOSEPH F. ANTOGNINI, does hereby declare and say:

1. My name is Joseph F. Antognini. I am a medical doctor, board-certified in anesthesiology. I received a B.A. degree from the University of California, Berkeley in Economics in 1980. I received my M.D. degree from the University of Southern California in 1984. I also received an M.B.A. from California State University, Sacramento in 2010. I was previously the Director of Peri-operative Services at the University of California, Davis Health System and a Professor of Anesthesiology and Pain Medicine and Professor of Neurobiology, Physiology and Behavior at the University of California, Davis. I am licensed to practice medicine in the State of California. I have over 30 years of experience practicing anesthesiology since 1984 when I began my residency at the University of California, Davis Health System. I am the author or co-author of over 200 publications. My area of research has been focused on anesthetic mechanisms, specifically related to where anesthetics produce unconsciousness, amnesia and immobility. A true and correct copy of my curriculum vitae is attached hereto as Exhibit B.

2. I have reviewed, and am familiar with, the allegations made in the complaint, the reports and/or declarations of Plaintiffs' experts, and additional information in the documents described below.

Scope of Engagement

3. I have been asked to render expert opinions in the fields of general medicine and anesthesiology, especially regarding the use, actions and efficacy of pentobarbital, in relation to South Dakota's lethal injection protocol, and the effectiveness of the procedures therein. I have



also been asked to render opinions regarding the efficacy of pentobarbital in the case of Charles Rhines, a condemned prisoner. This report contains a complete statement of my opinions, and the basis and reasons therefor, including the facts or data I have considered in forming them. The opinions that I do provide are within my field of anesthesiology and such fields as are necessarily related to anesthesiology, including general medicine, pharmacology and physiology, and fall within the scope of my expertise. All opinions expressed herein are stated to a reasonable degree of medical and scientific certainty unless otherwise noted.

Compensation

4. My fee schedule for this matter is as follows: \$650 per hour for nontestimonial work; \$700 per hour for deposition or video testimony; \$6000/day for in-person testimony and travel.

Materials Reviewed

5. I have conferred with attorneys for Defendants. Among the documents I have reviewed in connection with this case are the complaint (49CIV19-002940, filed 10/22/2019), publications in the "References Cited" section and the report of Craig Stevens, PhD. A list of documents I reviewed in preparation of this report is included in Exhibit A.

6. I am advised that discovery is not complete in this case and that more documents and information may become available to me at a later date. Should additional documents or information be provided to me for review and analysis, I reserve the right to take those additional materials into account, and to modify and/or supplement my opinions accordingly. I may also be present at hearings and/or trial. I may take into account any testimony or other evidence to the extent related to my opinions; I may modify and/or supplement my opinions accordingly. In performing my analysis, I have relied on my professional training, education and experience. The opinions presented in this report are my opinions and mine alone. I have reviewed and

considered documents and information and identified those materials (Exhibit A). These documents and other information that I reviewed and considered are of a type reasonably relied upon by experts in the field of anesthesiology, general medicine, physiology and pharmacology in forming opinions or inferences on questions in this area. I have looked upon all of these as valuable sources of information that I am obliged to consider.

Background

7. The intravenous administration of five (5) grams of pentobarbital would result in 1) rapid and deep unconsciousness within 20-30 sec, followed by 2) markedly depressed drive to breathe, followed by 3) absence of breathing, followed by 4) decreased oxygen levels in the body, followed by 5) slowing of the heartbeat, followed by 6) the heart stopping, i.e., death. During this period there will also be cardiovascular depression and collapse.

(see <http://emedicine.medscape.com/article/813155-overview#a5> accessed 10-23-19)

8. As stated above, pentobarbital (5 grams) causes rapid unconsciousness followed by respiratory arrest, cardiovascular collapse and death. After intravenous injection of 5 grams pentobarbital, concentrations of pentobarbital will far exceed the lethal concentrations—see Table 1, package insert for pentobarbital in References Cited (Exhibit A) and extrapolating from data of *Ehrnebo* (1974). Once respiratory depression and arrest occurs within 1-2 minutes, the unconscious inmate then begins to use up the oxygen stores in his body, which are estimated to be 1200 ml (*Campbell & Beatty*, 1994). Normal oxygen consumption is about 250-300 ml/min, and virtually all the oxygen in the inmate's body will be used after 4-5 min. In fact, estimates of oxygen saturation after apnea confirm this relationship (*Farmery & Roe*, 1996). Before all the oxygen is used, however, the heart will be affected, will begin to slow and will then have periodic irregular beats. It likely will take several minutes before the heart stops all together. At

that point, death is declared. This process, as described, is irrefutable. It is based on the known actions of pentobarbital and sound pharmacological and physiological principles, and the known effects of these doses of pentobarbital in lethal executions.

9. These actions of pentobarbital are consistent with data published by *Aleman et al.*, (2015), a study extensively discussed in the recent US Supreme Court case *Bucklew v. Precythe*, No. 17-8151 (decided April 1, 2019). In the *Aleman* study, horses were administered large, lethal doses of pentobarbital, with a mean time of infusion of 47 seconds, and the horses developed electroencephalographic brain silence (i.e., flat line) at a mean of 53 seconds after the initiation of the infusion, that is, EEG silence occurred on average, 6 seconds after the infusion finished. Because loss of consciousness occurs before EEG silence, these data fit with a time frame of 20-30 seconds for loss of consciousness after the initiation of the pentobarbital infusion.

10. In a similar study (*Buhl et al.*, 2013), the time to collapse (when the horses went from standing to falling to the ground) was about 27 seconds (the average of the means of the four groups studied; see their table 2) after the initiation of the infusions. They also noted that respiratory arrest occurred simultaneous with falling to the ground in most horses (2nd paragraph in discussion).

11. These actions of pentobarbital listed above are consistent with the actions of an ultra-fast acting/ultra-short acting barbiturate that is administered in a large lethal dose as specified in the South Dakota protocol.

12. It is important to understand how barbiturate drugs can be classified as “ultra-short acting”, “ultra-fast acting”, “fast acting” and “short acting”, and how this classification is not absolute, and depends in large part on the dose of the drug and the route that it is administered

(oral versus intravenous). The term "short acting" refers to the duration of action, that is, how long (time) does the drug have its intended effect, while "fast acting" refers to the onset of action, how long does it take for an effect to occur. In the case of barbiturates, an "ultra-short acting" barbiturate at a typical clinical dose has a duration of 5-10 minutes, while a "short acting" barbiturate at a typical clinical dose might have a duration of 15 minutes (see Table, Exhibit C). These concepts are outlined graphically in Exhibit D.

13. In the chapter in Miller's Anesthesia (1st Edition, 1981) which contains the material on barbiturates, the author writes:

"For matters of classification, the barbiturates are divided into four classes according to their duration of activity: long-acting, medium-acting, short-acting, and ultra-short-acting. However, this classification is often altered depending on the route of administration (oral versus intravenous), dose, use of other compounds, and the species." (Stanley, 1981).

Because this chapter was written within a few years prior to the 1984 South Dakota law, it informs our understanding of how barbiturates were classified at the time. Clearly, the author conveys the idea that the classification of barbiturates is subject to interpretation and circumstances, specifically dose and route of administration.

14. The inexactitude of this classification has been known for many years and found to be "scientifically unsound" (Mark, 1969). In 1969, L.C. Mark described the classification as archaic (Mark, 1969) writing:

"The spectrum of barbiturate effects extends in dose-dependent fashion from sedation to hypnosis to anesthesia to poisoning to death. Any of these

effects can be achieved deliberately or accidentally by any barbiturate given in appropriate dosage....”

15. Likewise, Breimer wrote (*Breimer, 1979*):

“It is surprising that this classification still persists in pharmacology textbooks”.

16. In fact, Dr. Stevens, in his chapter on CNS active drugs (*Brenner and Stevens, Pharmacology, 2018*) makes no mention of ultra-short-acting barbiturates, and lumps pentobarbital and thiopental together as “short acting” (see his Table 19-1, pg 209). He distinguishes thiopental’s onset of action from pentobarbital’s onset as “very fast” versus “fast” but specifies that the onset for thiopental is for the intravenous administration, while for pentobarbital he describes attributes related to oral administration. Thus, even Dr. Stevens’s description indicates that these differences are open to interpretation depending on the drug and mode of administration.

17. The administered dose of these drugs, relative to the classification, is important to point out. If a small enough dose of pentobarbital is administered, no effect is observed. If incrementally larger doses are administered, eventually an effect would be seen, but its duration could be on the order of just a few minutes, and thus the drug would be “ultra-short acting”. For example, in the *Ehrnebo* study (1974) only 3 of 7 subjects administered 100 mg pentobarbital intravenously fell into a light sleep, and that was for 20-30 min. Thus, a smaller dose in those subjects would have likely produced a shorter duration of action, while a slightly larger dose in the other four subjects would have likely produced an effect with a duration of action in the range of 5-10 minutes (see Exhibit D for graphical representation of this concept).

18. With thiopental administered at large sub-lethal doses for a prolonged period, the duration of action would likely be on the order of hours and would clearly exceed the “ultra-short acting” range. Finally, if thiopental is administered in large lethal doses, as in the setting of an execution, clearly its classification as an “ultra-short acting” barbiturate is meaningless.

19. The decision in the Montana case (*Smith v Montana State Dept of Corrections*, 2015 WL) as cited in the complaint, also uses the terms “ultrafast acting” and “ultrashort acting”, and groups the two together (see table at *3), and likewise does the same with “fast acting” and “short acting”. Furthermore, the Montana decision describes the opinion of Dr. Heath as follows: “it is often important to have a very quick transition from consciousness to unconsciousness” and that “this is the purpose of the development of ultra-fast-acting barbiturates.” (at *2 of the decision).

20. To reiterate, these distinctions mentioned above help inform our understanding of the term “ultra-short acting” in the context of lethal execution. Thiopental and methohexital, which the inmate claims are “ultra-short acting”, would not be so at the doses and route administered for lethal injection. At much larger doses, thiopental is not ultra-short acting. Patients administered large doses of thiopental for prolonged periods do not awaken quickly. Furthermore, as noted above, pentobarbital at the dose administered in the South Dakota protocol (5 grams) would induce rapid unconsciousness, within 20-30 seconds.

Conclusion

21. It is my opinion, to a reasonable degree of medical and scientific certainty, that 1) the inmate would become unconscious within 20-30 sec after the initiation of the infusion of the pentobarbital, followed by respiratory arrest, cardiovascular collapse and death; 2) injection of

massive doses of barbiturates in this inmate would not inflict mild, moderate or severe pain; 3) these actions of pentobarbital are consistent with a drug classified as an ultra-fast acting/ultra-short acting barbiturate when administered in these massive doses.

22. Should additional information become available I reserve the opportunity to amend my statements herein.

Date: October 26, 2019

A handwritten signature in black ink, appearing to read 'J. Antognini', written over a horizontal line.

Joseph F. Antognini, M.D., M.B.A.

Exhibit A—References Cited

Aleman M, Williams DC, Guedes A, Madigan JE. Cerebral and brainstem electrophysiologic activity during euthanasia with pentobarbital sodium in horses. *J Vet Int Med* 2015; 29:663-72

Brenner GM, Stevens CW. Sedative-hypnotic and anxiolytic drugs. In: *Pharmacology*, 5th Ed. 2018 Elsevier

Breimer DD. Clinical pharmacokinetics and biopharmaceutical aspects of hypnotic drug therapy. In: *Sleep Research*, Eds. Priest RG, Pletscher A, Ward J. MTP Press, Lancaster, England, 1979

Buhl R, Andersen LOF, Karlshoj M, Kanters JK. Evaluation of clinical and electrocardiographic changes during the euthanasia of horses. *The Veterinary Journal* 2013; 196:483-91

Campbell IT, Beatty PCW. Measuring pre-oxygenation. *British J Anaesthesia* 1994; 72:3-4.

Ehrnebo M. Pharmacokinetics and distribution properties of pentobarbital in humans following oral and intravenous administration. *J Pharmaceutical Sciences* 1975; 63:1114-18

Farmery AD, Roe PG. A model to describe the rate of oxyhaemoglobin desaturation during apnoea. *British J Anaesthesia* 1996; 76:284-91

Lafferty KA. Barbiturate Toxicity. <http://emedicine.medscape.com/article/813155-overview#a5> accessed 10-23-19

Mark LC. Archaic classification of barbiturates. *Clin Pharmacology Therapeutics* 1969; 10:287-291

Stanley TH. Pharmacology of intravenous non-narcotic anesthetics. p452 In: *Anesthesia*. Ed: Miller RD. Churchill Livingstone, New York, 1981

Wyant GM, Dobkin AB, Aasheim GM. Comparison of seven intravenous anaesthetic agents in man. *Brit J Anaesthesia* 1957; 29:194-209

Smith v Montana State Dept of Corrections, 2015 WL

Pentobarbital package insert (accessed 10-24-19):
http://www.akorn.com/documents/catalog/package_inserts/76478-501-20.pdf

Declaration of Craig Stevens, Ph.D, dated Oct 22, 2019

Complaint 49CIV19-002940, filed 10/22/2019

Pentobarbital data from US National Library of Medicine TOXNET (accessed 10-26-19):
<https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@rn+@rel+76-74-4>

Thiopental data from US National Library of Medicine TOXNET (accessed 10-26-19):
<https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?/temp/~DaPJwj:1>

Exhibit B

CURRICULUM VITAE Joseph F. Antognini, M.D., M.B.A.

CONTACT:

ifantognini@icloud.com
ifantognini@ucdavis.edu

EDUCATION:

1980	University of California, Berkeley (B.A., Economics)
1984	University of Southern California (M.D., Medicine)
2010	California State University, Sacramento (M.B.A., Business)

INTERNSHIP/RESIDENCY:

1984-1987	Anesthesiology, UC Davis Medical Center
1986-1987	Chief Resident

PROFESSIONAL POSITIONS:

9/16-present	Physician Surveyor The Joint Commission Oakbrook Terrace, IL
7/17-present	Director Emeritus University of California, Davis
7/11-present	Clinical Professor of Anesthesiology and Pain Medicine (Volunteer Clinical Faculty appointment) University of California, Davis—School of Medicine
11/10-6/16	Director of Peri-operative Services UC Davis Health System
7/00-7/11	Professor of Anesthesiology and Pain Medicine (with tenure) Department of Anesthesiology and Pain Medicine University of California, Davis—School of Medicine
12/02-7/11	Professor of Neurobiology, Physiology and Behavior (with tenure; WOS appointment) College of Biological Sciences University of California, Davis

11/98-7/10	Vice Chairman, Director of Research
11/98-3/02	Director of Malignant Hyperthermia Diagnostic Laboratory Department of Anesthesiology
7/96-7/00	Associate Professor (with tenure) Department of Anesthesiology University of California, Davis—School of Medicine
10/91-6/96	Assistant Professor Department of Anesthesiology University of California, Davis—School of Medicine
7/87-9/91	Staff Anesthesiologist (Private Practice) American River Hospital Department of Anesthesiology Carmichael, CA
7/87-9/91	Assistant Clinical Professor (volunteer) Department of Anesthesiology University of California, Davis—School of Medicine

LICENSURE & CERTIFICATIONS:

State of California #G55662 (active)
Diplomate, National Board of Medical Examiners (1985)
Diplomate, American Board of Anesthesiology (1989)
Certificate of Recertification, American Board of Anesthesiology (1999, 2009)
Certified Yellow Belt, 2017

PROFESSIONAL SOCIETIES AND RECOGNITION:

American Society of Anesthesiologists 1987—present
California Society of Anesthesiologists 1987—present
Fellow of the American Society of Anesthesiologists 2018—present

ADVOCACY

ASA Grassroots Network (ASA Team 535) 2018
ASAPAC Donor—2018
FAER Donor—1999-2018

RESEARCH INTERESTS:

Mechanisms of anesthesia; factors influencing anesthetic requirements; OR efficiency

AWARDS AND HONORS

Dean's Mentoring Award, UC Davis School of Medicine, 2006

Associated Students of UC Davis "Excellence in Education Award" College of Biological Sciences, 2007

Associated Students of UC Davis "Excellence in Education Award" Outstanding Educator, 2007

Foundation for Anesthesia Education and Research, Mentor Academy, 2008

Phi Kappa Phi Honor Society, 2010

GRANTS

1. UC Davis Faculty Research Grant 1991-92—The effect of intrathecal aspirin on anesthetic requirements in rabbits, \$2500
2. UC Davis Faculty Research Grant 1993-94—Validation of a preferentially anesthetized goat brain model, \$1500
3. Foundation for Anesthesia Education and Research 1994—Determination of gross anatomic sites of anesthetic action, \$25,000 (\$25,000 matching departmental funds)
4. UC Davis Faculty Research Grant 1994-95—The effects of general anesthesia on cerebral blood flow patterns as assessed by functional magnetic resonance imaging, \$1500
5. UC Davis Faculty Research Grant 1996-97—The effect of differential isoflurane delivery to brain and spinal cord on inhibitory and excitatory output from the brain, \$10,000
6. Foundation for Anesthesia Education and Research 1997-99—The effect of differential isoflurane delivery to brain and spinal cord on inhibitory and excitatory output from the brain, \$70,000 (\$70,000 matching departmental funds)
7. NIH R01 GM57970 Brain and Spinal Cord Contributions to Anesthetic Action 8/98-4/02 (Priority Score 120, Percentile 1.0). Total costs \$713,026
8. NIH R01 GM61283 Anesthetic Effects on Sensorimotor Integration 2/01-2/06 (Priority Score 194, Percentile 16.9). Total costs \$672,791
9. U.C. Davis Faculty Research Grant. Indirect effect of isoflurane and lidocaine on EEG activation. 7/1/01-6/30/02, \$4,000
10. NIH R01 GM57970-4A1 Brain and Spinal Cord Contributions to Anesthetic Action 4/02-12/05 (Priority Score 197, Percentile 20). Total costs \$1,284,689
11. NIH 3R01GM057970-05S1 Brain and Spinal Cord Contributions to Anesthetic Action. Minority Supplement grant. 7/03-7/04. Total costs \$55,932
12. NIH P01 GM47818 Anesthetic Effects on Spinal Nociceptive Processing 8/04-7/09 (Priority Score 185). Total costs \$804,325
13. NIH R01 GM61283A1 Anesthetic Effects on Sensorimotor Integration 12/05-12/9 (Priority Score 158, Percentile 9). Total costs \$748,432

TEACHING

Post-Graduate:

1. Resident lectures on neuroanesthesia, anesthetic mechanisms, malignant hyperthermia, neuromuscular blocking drugs, volatile anesthetics, anesthesia research. 1991-2019
2. Anesthesiology Department Journal Club 2013-2016

3. UCSF Changing Practice of Anesthesia—Faculty. September 2014: Peri-operative Medicine and Healthcare Reform: Challenges and Opportunities for Anesthesiology

Graduate:

Guest lecturer for NPB 219 (E. Carstens, Instructor). 1998-2003
 Guest lecturer for NPB 112 (E. Carstens, Instructor). 2001-2008
 Guest lecturer for first year medical students—pain physiology 2002-2003
 Facilitator, Application of Medical Principles 2002-2008
 Guest Lecturer, 210B (Systemic Physiology) January 2006
 Instructor of Record, Applied Physiology and Pharmacology 2007, 2008

Undergraduate:

NPB 10—Elementary Human Physiology (4 units). 2001-2009
 Freshman Seminar: The Supreme Court and You. (2 units) 1998-2010

MENTORED STUDENTS, RESIDENTS AND POST-DOCTORAL SCHOLARS

1. Kevin Schwartz, M.D.	Resident	1993
2. Michael Borges, M.D.	Resident	1994
3. Agi Melton, M.D.	Resident	1994
4. Etsuo Tabo, M.D.	Post-Doctoral Scholar	1997
5. Steven Jinks	Graduate Student	1998-2001
6. Chris Simons	Graduate Student	1998
7. Xiao Wei Wang, M.D.	Post-Doctoral Scholar	1999
8. Xiaoguang Chen, M.D.	Post-Doctoral Scholar	2000
9. Makoto Sudo, M.D.	Post-Doctoral Scholar	2000
10. Satoko Sudo, M.D.	Post-Doctoral Scholar	2000
11. Alison Fitzgerald	Undergraduate Student	2000-2001
12. Andrew Hall	Undergraduate Student	2001
13. John Martin, M.D.	Resident	2001
14. Steve Jinks, PhD.	Post-Doctoral Scholar	2001-2004
15. Jason Cuellar, BS	Graduate Student	2003-2004
16. Linda Barter, MSVM	Graduate Student	2004-2007
17. Mashawn Orth	Graduate Student	2004-2005
18. Carmen Dominguez, MD	Assistant Professor	2003-2005
19. Laurie Mark	Undergraduate Student	2005, 2006
20. Matthew LeDuc	Medical Student	2005
21. Toshi Mitsuyo, M.D.	Post-Doctoral Scholar	2004-2005
22. Kevin Ng, M.D.	Resident	2005-2006
23. JongBun Kim, M.D.	Post-Doctoral Scholar	2006
24. Sean Shargh	Undergraduate Student	2006-2007
25. Aubrey Yao, M.D.	Resident	2006-2007
26. Alana Sulger	Undergraduate Student	2006-2007
27. Gudrun Kungys, M.D.	Resident	2007-2008
28. Jason Talavera	Medical student	2007
29. Onkar Judge	Medical student	2008

30. Andrew Cunningham	Undergraduate Student	2008
31. Lauren Boudewyn	Undergraduate Student	2008
32. Austin Kim	Undergraduate Student	2008
33. Jason Andrada	Graduate Student	2009-2010
34. Jun Ye	Graduate Student	2014-2015
35. Reihaneh Forghany	Resident	2018-2019

SPECIAL ACTIVITIES:

Staff Anesthesiologist, American River Hospital, 1991-1992
 Medical Advisor, CMT International (Charcot-Marie-Tooth), 1991-2000
 Director, Case Conferences, Department of Anesthesiology, April-June, 1992
 Proctor, Medical Board of California, 1992
 Staff Membership, Sutter Davis Hospital, Davis, CA, 1992-1995
 Consultant, Malignant Hyperthermia Hotline, Malignant Hyperthermia Association of the United States (MHAUS), 1992-2002
 Associate, UC Davis Diagnostic Malignant Hyperthermia Laboratory, 1992-2010
 Member, Subcommittee on Experimental Neuroscience and Biochemistry, American Society of Anesthesiologists, 1996
 Finance and Executive Committees, U.C. Davis Department of Anesthesiology, 1996-2002
 Quality Assurance Committee, U.C. Davis Department of Anesthesiology, 1998-2004
 Course Director, Annual U.C. Davis Anesthesiology Update (CME meeting), 1996-2003
 California Society of Anesthesiologists: Educational Programs Committee, 1998-2000
 Coordinator, Grand Rounds, Department of Anesthesiology, 1996
 Professional Billing Workgroup, U.C. Davis, 1996-98
 Question Writer, American Board of Anesthesiology, 1998-2001
 Member, UC Davis Animal Care Committee, 2000-2003
 Member, UC Davis School of Medicine Personnel Committee, 2003—2007; Chair 2007
 Management Advisory Committee, Department of Anesthesiology, 2007
 Ad Hoc Reviewer for *Anesthesiology*, *Hospital Topics*, *Journal of Clinical Anesthesia*, *Journal of Comparative Neurology*, *Regional Anesthesia and Pain Medicine*, *Pain*, *Brain Research*, *Journal of Neuroscience*, *Anesthesia and Analgesia*, *British Journal of Anaesthesia*, *Neuroscience*, *Cephalgia*, *Neuroscience Letters*, *Journal of Chromatography*, *Basic & Clinical Pharmacology & Toxicology*, *Therapeutics and Clinical Risk Management*.
 Member, VA Merit Review Subcommittee, Alcohol and Drug Dependence, 2002-2005
 Editor, American Board of Anesthesiology/ American Society of Anesthesiologists In-Training Examination 2003-2008
 Associate Editor, *Anesthesiology* 2005—2011
 Faculty Executive Committee, School of Medicine 2009-2010
 Chair, Faculty Executive Committee, School of Medicine 2010-2011
 Member of various hospital committees 2011-2016: Medical Staff Executive Committee, Quality Safety Committee, OR Committee, Surgical Services Steering Committee

BIBLIOGRAPHY

EDITED BOOKS

1. Antognini JF, Carstens EE, Raines DE. Neural Mechanisms of Anesthesia, Humana Press, Totowa, NJ, 2002.

PUBLICATIONS

1. Antognini JF. Anaesthesia for Charcot-Marie-Tooth disease: a review of 86 cases. Canadian Journal of Anaesthesia 1992; 39(4):398-400.
2. Antognini JF and ND Kien. Cardiopulmonary bypass does not alter canine enflurane requirements. Anesthesiology 1992; 76:953-957.
3. Antognini JF. Intrathecal acetylsalicylic acid and indomethacin are not analgesic for a supramaximal stimulus. Anesthesia and Analgesia 1993; 76:1079-1082.
4. Antognini JF. Hypothermia eliminates isoflurane requirements at 20°C. Anesthesiology 1993; 78:1152-1156.
5. Antognini JF and GA Gronert. Succinylcholine causes profound hyperkalemia in hemorrhagic, acidotic rabbits. Anesthesia and Analgesia 1993; 77:585-588.
6. Melton AT, JF Antognini and GA Gronert. Prolonged duration of succinylcholine in patients receiving anticonvulsants: evidence for mild up-regulation of acetylcholine receptors? Canadian Journal of Anaesthesia 1993; 40(10):939-942.
7. Antognini JF and K Schwartz. Exaggerated anesthetic requirements in the preferentially anesthetized brain. Anesthesiology 1993; 79:1244-1249.
8. Antognini JF and PH Eisele. Anesthetic potency and cardiopulmonary effects of enflurane, halothane, and isoflurane in goats. Laboratory Animal Science 1993; 43(6):607-610.
9. Antognini JF. Splanchnic release of potassium after hemorrhage and succinylcholine in rabbits. Anesthesia and Analgesia 1994; 78:687-690.
10. Antognini JF, M Anderson, M Cronan, JP McGahan and GA Gronert. Ultrasonography: not useful in detecting susceptibility to malignant hyperthermia. Journal of Ultrasound in Medicine 1994; 13:371-374.

11. Antognini JF and ND Kien. A method for preferential delivery of volatile anesthetics to the *in situ* goat brain. *Anesthesiology* 1994; 80:1148-1154.
12. Antognini JF, BK Lewis and JA Reitan. Hypothermia minimally decreases nitrous oxide anesthetic requirements. *Anesthesia and Analgesia* 1994; 79:980-982.
13. Borges M and JF Antognini. Does the brain influence somatic responses to noxious stimuli during isoflurane anesthesia? *Anesthesiology* 1994; 81:1511-1515.
14. Antognini JF and ND Kien. Potency (minimum alveolar anesthetic concentration) of isoflurane is independent of peripheral anesthetic effects. *Anesthesia and Analgesia* 1995; 81:69-72.
15. Antognini JF and K Berg. Cardiovascular responses to noxious stimuli during isoflurane anesthesia are minimally affected by anesthetic action in the brain. *Anesthesia and Analgesia* 1995; 81:843-848.
16. Antognini JF. Creatine kinase alterations after acute malignant hyperthermia episodes and common surgical procedures. *Anesthesia and Analgesia* 1995; 81:1039-1042.
17. Gronert GA, NW Fleming and JF Antognini. Aberrant responses to muscle relaxants produced by diseases or drugs. *Seminars in Anesthesia* 1995; 14(4):283-290.
18. Hwang F, K Chun, JF Antognini and GA Gronert. Caffeine-halothane accuracy in MH testing. *Acta Anaesthesiologica Scandinavica* 1995; 39:1036-1040.
19. Antognini JF and K Mark. Hyperkalaemia associated with haemorrhagic shock in rabbits: modification by succinylcholine, vecuronium and blood transfusion. *Acta Anaesthesiologica Scandinavica* 1995; 39:1125-1127.
20. Antognini JF, R Wood and GA Gronert. Metocurine pharmacokinetics and pharmacodynamics in goats. *Journal of Veterinary Pharmacology and Therapeutics* 1995; 18:464-467.
21. Antognini JF. Movement associated with high cerebral concentrations of isoflurane: no evidence of seizure activity. *Canadian Journal of Anaesthesia* 1996; 43(3):310-314.
22. Antognini JF and GA Gronert. Extra-junctional receptors and neuromuscular blocking drugs. *Current Opinion in Anaesthesiology* 1996; 9:344-347.

23. Kien ND, JF Antognini, DA Reilly and PG Moore. Small-volume resuscitation using hypertonic saline improves organ perfusion in burned rats. *Anesthesia and Analgesia* 1996; 83:782-788.
24. Fleming NW, S Macres, JF Antognini and J Vengco. Neuromuscular blocking action of suxamethonium after antagonism of vecuronium by edrophonium, pyridostigmine or neostigmine. *British Journal of Anaesthesia* 1996; 77:492-495.
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26. Antognini JF. The relationship among brain, spinal cord and anesthetic requirements. *Medical Hypotheses* 1997; 48:83-87.
27. Antognini JF and GA Gronert. Continued puzzles in malignant hyperthermia. *Journal of Clinical Anesthesia* 1997; 9:1-3.
28. Antognini JF and GA Gronert. Effect of temperature variation (22°C-44°C) on halothane and caffeine contracture testing in normal humans. *Acta Anaesthesiologica Scandinavica* 1997; 41: 639-642.
29. Antognini JF, MH Buonocore, EA Disbrow and E Carstens. Isoflurane anesthesia blunts cerebral responses to noxious and innocuous stimuli: a fMRI study. *Life Sciences* 1997; 61:PL349-354.
30. Antognini JF. Isoflurane potentiates metocurine via peripheral not central nervous system action. *Journal of Veterinary Anaesthesia* 1997; 24:6-9.
31. Disbrow E, M Buonocore, J Antognini, E Carstens and HA Rowley. The somatosensory cortex: a comparison of the response to noxious thermal, mechanical and electrical stimuli using functional magnetic resonance imaging. *Human Brain Mapping* 1998; 6:150-59.
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34. Antognini JF, S. Jinks, V. Buzin, E. Carstens. A method for differential delivery of intravenous drugs to the head and torso of the goat. *Anesthesia and Analgesia* 1998; 87:1450-2.

35. Antognini JF, E. Carstens. Macroscopic sites of anesthetic action: brain versus spinal cord. *Toxicology Letters* 1998; 100-101:51-58.
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39. Antognini JF, XW Wang. Isoflurane can indirectly depress auditory evoked potentials by action in the spinal cord. *Canadian Journal of Anaesthesia* 1999; 46:692-95
40. Melton AT, JF Antognini, GA Gronert. Caffeine- or halothane-induced contractures of masseter muscle are similar to those of vastus muscle in normal humans. *Acta Anaesthesiologica Scandinavica* 1999; 43:764-69
41. Antognini JF, XW Wang, E Carstens. Quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation. *Anesthesiology* 1999; 91:1064-71
42. Antognini JF, E Carstens. Isoflurane blunts electroencephalographic and thalamic/reticular formation responses to noxious stimulation in goats. *Anesthesiology* 1999; 91:1770-9
43. Antognini JF, XW Wang, E Carstens. Isoflurane action in the spinal cord blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats. *Anesthesiology* 2000; 92:559-66
44. Antognini JF, XW Wang, M Piercy, E Carstens. Propofol directly depresses lumbar dorsal horn neuronal responses to noxious stimulation. *Canadian Journal of Anesthesia* 2000; 47:273-79
45. Antognini JF, Saadi J, Wang XW, Carstens E, Piercy M. Propofol action in both spinal cord and brain blunts electroencephalographic responses to noxious stimulation in goats. *Sleep* 2000; 24:26-31
46. Antognini JF, XW Wang, E Carstens. Isoflurane anaesthetic depth in goats

- monitored using the bispectral index of the electroencephalogram. *Veterinary Research Communications* 2000; 24:361-370
47. Antognini JF, Sudo M, Sudo S, Carstens E. Isoflurane depresses electroencephalographic and medial thalamic responses to noxious stimulation via an indirect spinal action. *Anesthesia and Analgesia* 2000; 91:1282-8
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 50. Rosenberg H, Antognini JF, Muldoon S. Testing for malignant hyperthermia. *Anesthesiology* 2002; 96:232-37
 51. Antognini JF, Carstens E, Atherley R. Does the immobilizing effect of thiopental in brain exceed that of halothane? *Anesthesiology* 2002; 96:980-6
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 53. Martin JT, Tautz TJ, Antognini JF. Safety of regional anesthesia in Eisenmenger's syndrome. *Reg Anesth Pain Med.* 2002;27:509-13.
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 57. Antognini JF, Atherley RJ, Carstens E. Isoflurane action in spinal cord indirectly depresses cortical activity associated with electrical stimulation of the reticular formation. *Anesthesia Analgesia* 2003; 96:999-1003

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61. Sonner JM, Antognini JF, Dutton RC, Flood P, Gray AT, Harris RA, Homanics GE, Kendig J, Orser B, Raines DE, Trudell J, Vissel B, Eger EI 2nd. Inhaled anesthetics and immobility: mechanisms, mysteries, and minimum alveolar anesthetic concentration. *Anesth Analg*. 2003;97:718-40.
62. Jinks SL, Antognini JF, Carstens E. Spectral analysis of movement patterns during anesthesia. *Anesth Analg*. 2004; 98:698-702.
63. Jinks SJ, Antognini JF, Dutton RC, Carstens E, Eger EI. Isoflurane depresses windup of c-fiber evoked limb withdrawal with variable effects on nociceptive lumbar spinal neurons in rats. *Anesth Analg* 2004; 99:1413-9
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67. Cuellar JC, Antognini JF, Carstens E. An in vivo method for recording single unit activity in lumbar spinal cord in mice anesthetized with a volatile anesthetic. *Brain Res Prot* 2004; 13:126-34
68. Cuellar JC, Antognini JF, Eger EI, Carstens E. Halothane depresses C-fiber-evoked windup of deep dorsal horn neurons in mice. *Neurosci Letters* 2004; 363:207-11

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73. Antognini JF, Carstens E. Anesthesia, Amnesia and the Amygdala: reducing the fear of intraoperative awareness. (Editorial) *Anesthesiology* 2005; 102:711-2
74. Cuellar JM, Montesano PX, Antognini JF, Carstens E. Application of nucleus pulposus to L5 dorsal root ganglion in rats enhances nociceptive dorsal horn neuronal windup. *J Neurophysiol* 2005 Mar 2.
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78. Jinks SL, Atherley RJ, Dominguez CL, Sigvardt KA, Antognini JF. Isoflurane disrupts central pattern generator activity and coordination in the lamprey isolated spinal cord. *Anesthesiology* 2005; 103:567-75.
79. Antognini JF, Jinks SL, Carstens EE. The spinal cord, anesthesia and immobility: a re-examination. *International Congress Series* 2005
80. Carstens E, Antognini JF. Anesthetic effects on the thalamus, reticular formation and related systems. *Thalamus and Related Systems*. 2005

81. Antognini JF, Barter L, Carstens E. Overview movement as an index of anesthetic depth in humans and experimental animals. *Comp Med*, 2005; 55(5): 413-8.
82. Antognini JF, Carstens E. Measuring minimum alveolar concentration: more than meets the tail. *Anesthesiology*, 2005; 103(4): 679-80.
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86. Orth M, Bravo E, Barter L, Carstens E, Antognini JF. The differential effects of halothane and isoflurane on electroencephalographic responses to electrical microstimulation of the reticular formation. *Anesth Analg*. 2006; 102:1709-14.
87. Hemmings HC, Jr, , Antognini JF. Do general anesthetics add up? *Anesthesiology*. 2006; 104:1120-2.
88. Merrill AW, Barter LS, Rudolph U, Eger EI 2nd, Antognini JF Carstens MI, Carstens E.. Propofol's effects on nociceptive behavior and spinal c-fos expression after intraplantar formalin injection in mice with a mutation in the gamma-aminobutyric acid-type(A) receptor beta3 subunit. *Anesth Analg*. 2006; 103:478-83
89. Antognini JF, Atherley RJ, Laster MJ, Carstens E, Dutton RC, Eger EI. A method for recording single unit activity in lumbar spinal cord in rats anesthetized with nitrous oxide in a hyperbaric chamber. *J Neurosci Methods*, 2006; 160(2): 215-22.
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91. Antognini JF, Bravo E, Atherley R, Carstens E. Propofol, more than halothane, depresses electroencephalographic activation resulting from electrical stimulation in reticular formation. *Acta Anaesthesiol Scand*, 2006, 50(8): 993-8.

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94. Barter LS, Mark LO, Smith AC, Antognini JF. Isoflurane potency in the Northern Leopard Frog *Rana pipiens* is similar to that in mammalian species and is unaffected by decerebration. *Vet Res Commun*, 2007; 31(6): 757-63.
95. Antognini JF, Atherley RJ, Dutton RC, Laster MJ, Eger EI, Carstens E. The excitatory and inhibitory effects of nitrous oxide on spinal neuronal responses to noxious stimulation. *Anesth Analg*, 2007; 104(4): 829-35.
96. Antognini JF, Raines DE, Solt K, Barter LS, Atherley RJ, Bravo E, Laster MJ, Jankowska K, Eger EI. Hexafluorobenzene acts in the spinal cord, whereas o-difluorobenzene acts in both brain and spinal cord, to produce immobility. *Anesth Analg*, 2007; 104(4): 822-8.
97. Kim J, Atherley R, Werner DF, Homanics GE, Carstens E, Antognini JF. Isoflurane depression of spinal nociceptive processing and minimum alveolar anesthetic concentration are not attenuated in mice expressing isoflurane resistant gamma-aminobutyric acid type-A receptors. *Neurosci Lett*, 2007; 420(3): 209-12.
98. Jinks SL, Carstens EE, Antognini JF. Glutamate receptor blockade in the rostral ventromedial medulla reduces the force of multisegmental motor responses to supramaximal noxious stimuli. *Neurosci Lett*, 2007; 426(3): 175-80.
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100. Kim J, Yao A, Atherley R, Carstens E, Jinks SL, Antognini JF. Neurons in the ventral spinal cord are more depressed by isoflurane, halothane, and propofol than are neurons in the dorsal spinal cord. *Anesth Analg*, 2007; 105(4): 1020-6, table of contents.
101. Barter LS, Mark LO, Jinks SL, Carstens EE, Antognini JF. Immobilizing doses of halothane, isoflurane or propofol, do not preferentially depress noxious heat-evoked responses of rat lumbar dorsal horn neurons with ascending projections. *Anesth Analg*, 2008; 106(3): 985-90, table of contents.

102. Barter LS, Antognini JF. Kinetics and potency of halothane, isoflurane, and desflurane in the Northern Leopard frog *Rana pipiens*. *Vet Res Commun*, 2008; 32(5): 357-65.
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EXHIBIT C

Table showing typical onset times and durations of action for thiopental (intravenous) and pentobarbital (oral and intravenous)

	TYPICAL ONSET (Clinical dose)	TYPICAL DURATION (Clinical dose)	TYPICAL ONSET (Execution dose)	TYPICAL DURATION (Execution dose)
Thiopental (intravenous)	10-40 seconds*	5-8 minutes* 5-95 minutes, mean 30 minutes**	10-40 seconds	Beyond duration of execution
Pentobarbital (oral pill)	15-60 minutes#	1-4 hours#	NA	NA
Pentobarbital (Intravenous)	1 minute#	15 minutes#	20-30 seconds##	Beyond duration of execution

#Pentobarbital data from US National Library of Medicine TOXNET (accessed 10-26-19):

<https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@rn+@rel+76-74-4>

*Thiopental data from US National Library of Medicine TOXNET (accessed 10-26-19):

<https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~DaPlwi:1>

based on Aleman et al. (2015) and Buhl et al. (2013)

** Wyant GM, Dobkin AB, Aasheim GM. Comparison of seven intravenous anaesthetic agents in man. *Brit J Anaesthesia* 1957; 29:194-209; total dose about 10.5 mg/kg in divided doses. These data show how just a 2-3x the usual clinical dose markedly increases the duration

Exhibit D

Figure 1

This schematic drawing shows how two drugs can have different durations of action. The brain concentration of the "short-acting" red drug is above the minimal brain concentration (dashed blue line) needed to produce the desired effect for a longer amount of time compared to that of the "ultrashort-acting" green drug. The onset times for the two drugs are the same.

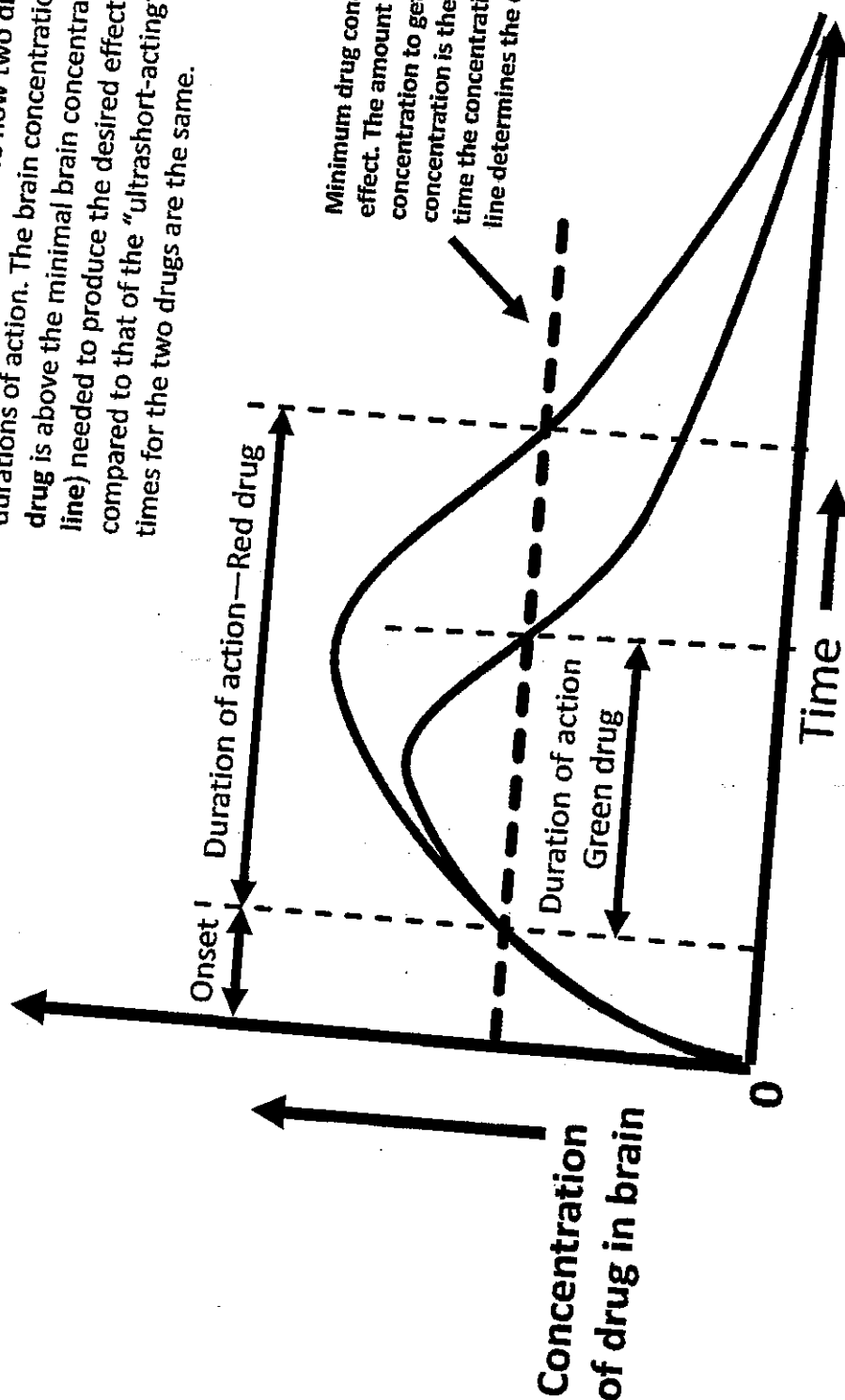
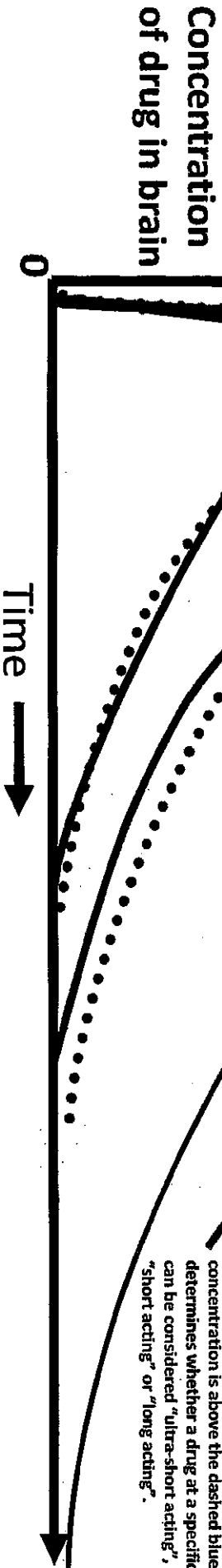


Exhibit D

Figure 2



Green drug = "ultra-short acting" This schematic shows how a drug that is typically considered "short acting" can be "ultra-short acting", and how an "ultra-short acting" drug can be "short acting" depending on the variable of dosage. When a drug is given intravenously, there is typically a very rapid rise in the concentration, followed by a variable decrease in the concentration over time. The desired clinical effect (e.g. unconsciousness) occurs when the drug concentration is above the minimal brain concentration required, shown by the dashed blue line. The longer the time the drug concentration is above the line, the longer the person will have the desired clinical effect. Likewise, the less time the drug concentration is above the dashed blue line, the shorter the duration of action, or effect. A typical clinical dose is the general baseline for classifying drugs as "ultrashort-" or "short-acting". But, since duration of action is a function of dosage, the classification can change if the dosage changes. For example, the green drug (solid green line) and red drug (solid red line) are typically considered "ultra-short acting" and "short-acting" when given in a typical clinical dose due to the briefer amount of time the green drug is above the dashed blue line relative to the red drug. But, if administered in a lower dosage, the "short-acting" red drug could become "ultrashort-acting" (dotted red line) given that its duration of action matches that of a usual dose of the green drug (solid green line). Conversely, if administered in a higher dosage, the "ultrashort-acting" green drug could become "short-acting" (dotted green line) given that its duration of action matches that of a usual dose of the "short-acting" red drug (solid red line). With a very large dose, an "ultra-short acting" drug (solid purple line) can become a "long-acting drug".

Minimum drug concentration needed for desired effect. The amount of time the concentration is above the dashed blue line determines whether a drug at a specific dose can be considered "ultra-short acting", "short acting" or "long acting".